



USAID
FROM THE AMERICAN PEOPLE

MUNICIPAL INFRASTRUCTURE AND IDP HOUSING REHABILITATION PROJECT

ANNUAL WORK PLAN (FY 2013/14)

CONTRACT: AID-EDH-I-00-08-00027-00, TASK ORDER: AID-114-TO-13-00005



26 February 2014

This document was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech for the Municipal Infrastructure and IDP Housing Rehabilitation Project, Task Order number AID-114-TO-11-00002 under the USAID Architectural and Engineering (A&E IQC).



MUNICIPAL INFRASTRUCTURE AND IDP HOUSING REHABILITATION PROJECT

ANNUAL WORK PLAN (FY 2013/14)

CONTRACT: AID-EDH-I-00-08-00027-00, TASK ORDER:
AID-114-TO-13-00005

26 February 2014

The following document was prepared by Tetra Tech (<http://www.tetrattech.com>).

DISCLAIMER

This report is made possible by the support of the American People through the United States Agency for International Development (USAID). The contents are the sole responsibility of Tetra Tech, and do not necessarily reflect the views of USAID or the United States Government.



26 February 2014

Mr. Bradley Carr, COR
Water Irrigation and Infrastructure Advisor
Office of Economic Growth
US Agency for International Development
11 George Balanchine Street
Tbilisi, 0131
Georgia

Re: Annual Work Plan (FY 2013/14) for the Municipal Infrastructure and IDP Housing Rehabilitation Project.

Dear Mr. Carr:

This report is being submitted to you in accordance with the requirements of Task Order no. AID-114-TO-13-00005 of contract AID-EDH-I-00-08-00027-00 and in recognition of the Contract program scope of work revisions. The report provides Tetra Tech's Annual Work Plan (FY 2013/14) for the Municipal Infrastructure and IDP Housing Rehabilitation for the current known conditions.

We look forward to your review and welcome your comments and suggestions.

Very truly yours,

A handwritten signature in blue ink that reads 'Glen Wills'.

Glen Wills
Chief of Party
Tetra Tech, Inc.
USAID/ Caucasus – Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP)
10th Floor, 154 Aghmashenebeli Ave.
Tbilisi, 0102, Georgia
Tel: +995599009347, Fax: +995322910401
Email: Glen.Wills@tetrattech.com

CC:USAID (George Kokochashvili); MDF (Kartlos Gviniashvili); Tetra Tech (Firouz Rooyani, Dean White, Brian Potvin, Andrew High, Document Control Center)

TABLE OF CONTENTS

TABLE OF CONTENTS	i
Acronyms	ii
1. Executive Summary	I
2. Introduction and Program Overview	4
2.1 Authorization	4
2.2 Purpose of Report.....	4
2.3 Background	5
2.4 Project Objectives.....	5
2.5 Project Components	5
3. Management Approach	7
3.1 Overview and Management.....	7
3.2 Project Partners	7
4. Project Work Program	13
4.1 Project Tasks	13
4.2 Project Selection.....	13
4.3 Environmental Clearance.....	16
4.4 Procurement.....	16
4.5 Design	20
4.6 Construction Phase.....	24
4.7 Capacity Building and Training.....	26
5. Project Schedule	28
5.1 General	28
5.2 Component 1 Municipal Infrastructure	28
5.3 Component 2 Irrigation	29
5.4 Component 3.1 Cottage Settlements	30
5.5 Component 3.2 Buildings.....	30
6. Tetra Tech Staffing Plan	33
6.1 General	33
6.2 Budget	34
6.3 Tbilisi Office Project Management Team	37
6.4 USA Home Office Support Team	37
6.5 Tbilisi Office Management/Administrative Support Team	38
6.6 Tbilisi and Regional Engineering Oversight Technical Team	38
6.7 Contract Administration Oversight Team:.....	39
6.8 Environmental Support Team:	39
7. Tetra Tech Oversight and Monitoring Plan	40
7.1 Project Management Plan	40
7.2 Design/Construction Management Plan	40

7.3	Quality Assurance/Quality Control Management	44
7.4	GMIP Environmental Procedures.....	48
8.	Reports and Deliverables.....	49
	Annex I: Tetra Tech Implementation Schedule (Oct 2012 – Sep 2013).....	51
	Annex 2: List Of Key Project Staff.....	1
	Annex 3: Year 2 Level Of Effort	3

List of Tables

Table 1: Project Participants Roles and Responsibilities	7
Table 2 Project Phases/Activities	13
Table 3 Project Selection	13
Table 4 Environmental Clearance Status	16
Table 5 Procurements December 2013)	16
Table 6 Procurement Plan	19
Table 7 Procurement Process	20
Table 8 Designs to Be Reviewed/Approved by Tetra Tech GMIP	23
Table 9 Construction Contracts to be Monitored by Tetra Tech	25
Table 10 Year 2 LOE Summary	34
Table 11 Budget Realignment	34
Table 12 Reports and Deliverables (July 2013 – June 2014)	49

List of Figures

Figure 1 Project Components	6
Figure 2 GMIP Project Location Map	15
Figure 3 Component 1 Municipal Infrastructure Schedule	Error! Bookmark not defined.
Figure 4 Component 2 Irrigation Schedule	29
Figure 5 Component 3.1 Cottage Settlements Schedule	Error! Bookmark not defined.
Figure 6 Component 3.2 Building Schedule	Error! Bookmark not defined.
Figure 7 Tetra Tech Organization Chart	36
Figure 8 Project Management Relationships	40
Figure 9 Approval Process	41
Figure 10 MDF Project Management Structure	42
Figure 11 Top-Level QA/QC Structure	Error! Bookmark not defined.
Figure 12 GMIP Lines of Authority and Communication	45
Figure 13 Document and Data Management Control	47

ACRONYMS

BD	Bid Document
BOQ	Bill of Quantities
CC	Internally Displaced Persons Durable Housing Collective Center
CCN	Cooperating Country National
CFR	Code of Federal Regulations
CO	USAID Contracts Office
COP	Chief Of Party
COR	USAID Task Order Cognizant Technical Officer
DB	Design-Build
DBB	Design-Bid-Build
DCC	Document Control Center
DCOP	Deputy Chief Of Party
DRC	Danish Refugee Council
EA	Environmental Assessment
EC	European Commission
EIA	Environmental Impact Assessment
EOI	Expression of Interest
EPI	Economic Prosperity Initiative USAID Project
ESS	Environmental Scoping Statement
GEL	Georgian Lari
Geo	Geo Ltd
GMIP	Municipal Infrastructure and IDP Housing Rehabilitation Project (the project)
GoG	Government of Georgia
GWUC	Georgian Water Utility Company
HO	Home Office
IDP	Internally Displaced Persons
IFB	Invitation for Bid
IL	Implementing Letters
Kav	Kavgiprotransi-Mg Ltd
GWUC	Georgian Water Utility Company
LTTA	Long Term Technical Assistance
MDF	Municipal Development Fund
MOA	Ministry of Agriculture
MRA	Ministry of Internally Displaced Persons from Occupied Territories, Accommodations and Refugees of Georgia (MRA)
MRDI	Ministry of Regional Development and Infrastructure
NEO	New Economic Opportunities (USAID Project)
NGO	Non-Government Organization
NTP	Notification to Proceed
OSCE	Organization for the Security and Co-operation of Europe
PEA	Programmatic Environmental Assessment
PMC	Project Management Committee
PMP	Performance Monitoring Plan
QA/QC	Quality Assurance/Quality Control
RFP	Request for Proposal
SOW	Scope of Work
STTA	Short Term Technical Assistance
TBD	To Be Determined
Tt	Tetra Tech
UNHCR	United Nations High Commissioner for Refugees
USAID	United States Agency For International Development
USG	U.S. Government

WB

World Bank

I. EXECUTIVE SUMMARY

Under the United States Agency for International Development (USAID– Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP II) Contract No. AID-EDH-I-00-08-00027-00 Task Order No: AID-I 14-TO-I3-00005, Tetra Tech (Tt) is responsible for providing support to monitor current processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected municipal and Internally Displaced Persons (IDP) infrastructure projects are implemented effectively and in accordance with U.S. and Georgian standards and regulations. The period of performance for the Tetra Tech Task Order is July 29, 2013– December 31, 2014.

The purpose of this report is to present the Tetra Tech Annual Work Plan (FY 2013/14). This report details the work to be accomplished for GMIP II during the upcoming year for the period from July 29, 2013 to December 31, 2014. To help ensure an effective transition the report builds upon the Work Plan that was prepared by Tetra Tech for Contract No. AID-EDH-I-00-08-00027-00 Task Order No: AID-I 14-TO-I 1-00002 which is referred to as GMIP I.

The USAID/Georgia Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP II) has two components: Component 1, Municipal Infrastructure (\$9.57 million) and Rehabilitation of Irrigation Infrastructure (\$8.16 million); and Component 2, IDP Durable Housing (\$34.67 million). The GMIP has a number of cooperating partners. The primary partners implementing the project on day-to-day basis are USAID/Georgia (USAID), Government of Georgia Municipal Development Fund (MDF), the Ministry of Internally Displaced Persons from the Occupied Territories, Accommodation and Refugees of Georgia (MRA) Tetra Tech (Tt), and the MDF feasibility, design, construction supervision and construction contractors.

Projects originally selected by USAID and the Government of Georgia (GOG) included five (5) municipal infrastructure sub-projects (roads and water supply) in five (5) municipalities; an irrigation project covering two major schemes totaling 18,000 ha with over 100 km of canals; water supply and sanitary upgrades for 11 cottage settlements (2000 cottages); and rehabilitation of 46 IDP buildings and 2,100 apartments located in 5 regions requiring more than 11 construction contracts in multiple locations throughout Georgia. In July 2013, the project changed dynamically due to unforeseen conditions including non-performance of the Irrigation Contactor and issues with the MRA not being able to fulfill its obligation to provide suitable buildings or sites for construction or to secure temporary housing for IDPs living in many of the buildings identified for rehabilitation. This resulted in a downsizing of the irrigation project and readjustment of the Component 2 Durable Housing Program. Project selection status is presented in Section 4.2 Project Selection, Table 3.

Tetra Tech is responsible for providing USAID and its implementing partners under GMIP (Table 1) immediate access to a team of full-time and short-term technical assistance that includes all related fields of expertise required for successful oversight of implementation of Components 1 and 2 of the Task Order. This expertise includes procurement management, engineering, environmental science, construction management, monitoring, inspection, and technical training. In addition to providing oversight for implementation of MDF's USAID-funded infrastructure projects, Tetra Tech is responsible for strengthening the capacity of MDF and project recipients to help ensure long-term sustainability of project interventions.

The major project phases/activities of the work plan include project selection (completed with GMIP I), environmental clearances (completed with GMIP I), procurement (ongoing), design/construction (ongoing), and capacity building (ongoing). The scope of work over the next one and a half years (FY 2013/14) includes oversight and monitoring of ongoing procurements which are planned for construction and construction management/supervision for Component 2.2 IDP Durable Housing, design reviews, construction management, construction monitoring and oversight, construction (design changes and as-built drawings), and warranty work for all Components (The Design Phase is

ongoing. It began on September 15, 2011 with GMIP I and is projected to be completed September 2014. Table 5 presents the status of designs under GMIP with all grey shading* indicating reviews completed or cancelled during GMIP I.

Table 8

A project schedule has been developed in MS Project (Annex I) that includes those projects that began with GMIP I and are continuing under GMIP II to present graphically the details of the proposed implementation plan and the timelines for the implementation of different tasks, reporting, and planning activities. The schedule shows that all construction contracts for the entire program are scheduled to be completed and closed out by September 30, 2014. Warranty periods are expected to extend beyond December 31, 2014, the end of project the Tetra Tech Task order.

The main Tetra Tech project office is located in Tbilisi adjacent to MDF. Day-to-day project activities are managed from this office. A regional office is operating in Kutaisi and is proposed to remain operational through the full period of the Task Order. This office will be an integral part in establishing the GMIP warranty program which is scheduled to begin in October 2013 for the ten (10) unoccupied buildings program and continue until the end of GMIP II, when it is envisioned that the management of the warranty program will transfer to USAID for completion.

Tetra Tech is providing a team of full-time (LTTA) and short-term (STTA) technical assistance that includes all related fields of expertise. The estimated level of Effort for the Task Order (July 2013 – December 2014) is shown below:

HO Support (da)	LTTA (da)		STTA (da)		Total (da)
	Expat	CCN	Expat	CCN	
1166	638	4,725	70	455	6,004

A GMIP gap analysis was carried out in May 2012. It recommended additional Tetra Tech staffing support to include local project engineers, an additional LTTA expatriate construction engineer (or if funds were not available additional support for the project with regular expat and local STTA), additional office space, and vehicles. An additional local STTA roads engineer was hired. At that time, sufficient funds were not available to hire an additional LTTA expatriate.

A budget realignment for GMIP I was prepared and submitted to USAID in September 2012. A restructuring of the budget was required to readjust for level of effort in certain categories that were not anticipated in the original budget. This included an increase in over 160 days of environmental expat STTA required to assist with clearance of 10 separate environmental actions (Table 4), which was considerably more than anticipated in the original work plan. Although the actual Year 1 budget (June 2011- May 2012) was 2% less than the original budget, it was necessary to increase the Year 2 budget to USD 1,992,846 with an average monthly burn rate of USD 166,000 or 6% increase over the original budget to meet current project needs and project requirements for Year 2 (June 12 – May 13). To account for increases in the Year 2 budget, the proposed Year 3 (June 13 – November 13) budget was reduced by 9% from the original budget. Implementation of the realigned budget required a compression of the schedule and LOE adjustment that moved the end date to June 20, 2013. Two additional modifications were issued which extended the contract to July 20, 2013 and July 27, 2013 respectively.

USAID issued the RFTOP SOL-114-13-000002, Infrastructure Oversight and Capacity Building USAID– Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP II) on March 28, 2013 which anticipated an 18 month task order under USAID’s Global Architect-Engineer Infrastructure Services Contract. The work outlined in the RFTOP was essentially an extension of the work performed by Tetra Tech under GMIP I. After a competitive bid, Tetra Tech was awarded

this contract on July 26, 2013 with a NTP of July 29, 2013, a ceiling price of \$2,899,935 and an obligated amount of \$2,225,935, leaving no gap in our services. At the time of the award, USAID requested Tetra Tech to acknowledge that negotiations might need to continue to resolve budget issues and, if necessary, modify the task order with the final negotiated budget. During the initial project startup in August 2013, project scope adjustments were identified and analyzed which were included in the Rapid Appraisal Report submitted to USAID for consideration on 12 September 2013. A realigned budget was included in that report and is also used as the basis of this Work Plan.

2. INTRODUCTION AND PROGRAM OVERVIEW

2.1 Authorization

Under the USAID– Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP II) Contract No. AID-EDH-I-00-08-00027-00 Order No: AID-114-TO-I 3-00005, Tetra Tech (Tt) is responsible for providing support to monitor current processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected municipal and Internally Displaced Persons (IDP) infrastructure projects are implemented effectively and in accordance with U.S. and Georgian standards and regulations.

The period of performance for the contract is July 29, 2013– December 31, 2014.

2.2 Purpose of Report

The purpose of this report is to present the Annual Work Plan (FY 2013/14). This report details the work to be accomplished during the upcoming year for the period from 29 July 2013 to 31 December 4.

The work plan has separate sections for each of the two components of the SOW and includes task items such as start/completion dates, work activities, long-term and medium/short-term personnel needs, procurement planning, etc. It includes a description of the management structure, proposed schedule, work flow, and overall program approach.

Per the contract, the work plan includes a staffing plan detailing required short term personnel and other outside technical support including planning, engineering and administrative oversight, capacity building, monitoring and evaluation, and other technical services. The work plan has been developed in consultation with USAID and MDF. It includes implementation sequencing, time line estimates, and critical paths. The work plan was developed based on consultation with USAID/Georgia and Municipal Development Fund (MDF) counterparts.

This Work Plan is designed to be responsive to the logistical and administrative challenges posed by concurrently implementing a wide range and types of subprojects, from domestic water supply and irrigation systems to the rehabilitation of IDP apartment buildings and improved water supply and sanitation for IDP cottage communities. The subprojects are situated over a fairly wide area of Georgia, and travelling from one to another can take several hours by road. There are works remaining from GMIP I that will continue under GMIP II for:

- Rehabilitation of 34 IDP apartment buildings (10 Unoccupied, 8 Former Hospitals and 26 Collective Centers) and 2,100 apartments located in five (5) regions
- Water supply and sanitary upgrades for 11 cottage settlements (2000 cottages) in 2 regions and 5 districts
- Infrastructure improvement projects:
 - Water supply treatment facility upgrade for 2000 persons In Oni municipality.
 - Irrigation rehabilitation in two large schemes with over 100 km of canals in Shida Kartli.

The Work Plan has separate sections presenting the i) Management Approach; ii) Project Work Program; iii) Project Schedule; iv) Tetra Tech Staffing Plan; iv) Tetra Tech Oversight and Monitoring Plan; and v) Reports and Deliverables. The Project Schedule and list of Tetra Tech key personnel are provided as annexes.

Per the contract, this annual Work Plan may be revised on an occasional basis, as needed, to reflect project changes on the ground and with the concurrence of the COR.

2.3 Background

The dual shocks of Georgia's August 2008 conflict with Russia and the global economic downturn posed serious challenges to Georgia's economic stability. This in turn put pressure on Georgia's political stability. The conflict, crisis, and subsequent slowdown in economic growth and foreign direct investment have placed a severe strain on Georgia's national budget and its ability to finance core investments in critical regional development initiatives. Many years of decline in the quality, coverage and maintenance of basic services, including water supply, sewage, local roads, solid waste services, and irrigation systems have dramatically reduced Georgia's quality of life in rural areas and constrained private sector growth. Such degradation and instances of conflict-related damage have resulted in significant constraints to the productive capacity and quality of life of thousands of Georgians, including old and new IDPs, rural poor, and persons directly or indirectly affected by the 2008 conflict with Russia.

2.4 Project Objectives

The major purpose of this project is to improve the infrastructure in five selected municipalities - Dusheti, Mtskheta, Gori, Kareli, and Oni, affected during Russian Georgian conflict in 2008 and improve living standards for nearly 4,000 houses constructed by the GoG without running water or sewer systems for IDPs from the August 2008 conflict, to provide each house with a shower, sink, toilet, water taps and other renovation as necessary. The funds will also be used to upgrade existing IDP shelters and redevelop buildings for use as durable housing for IDPs from previous conflicts. Funding will also support various other activities focused on ensuring overall sustainability of IDP housing.

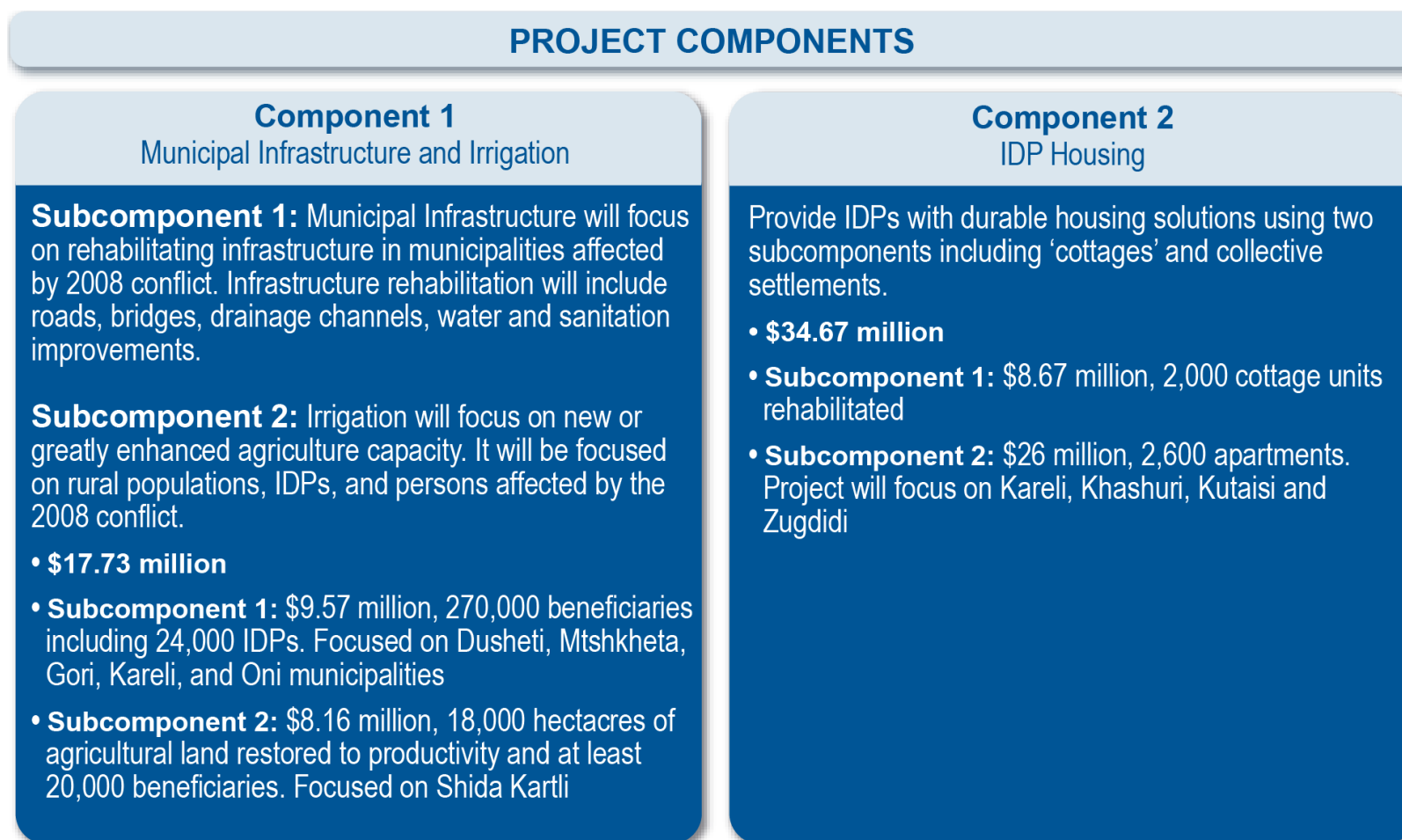
Activities performed under this task order will complement and reinforce the activities, project management, and engineering expertise of USAID/Georgia and its implementing partners. From 2010 to 2014, USAID/Georgia will undertake works in the infrastructure sector in collaboration with MDF to upgrade municipal infrastructure in targeted municipalities, to install and extend irrigation channels, and to upgrade IDP housing. Municipal infrastructure and irrigation rehabilitation will be implemented through an agreement with the MDF, and the IDP housing will be implemented through a separate agreement with this same agency. Tetra Tech is expected to form a close working relationship with the MDF in the implementation of both projects, accompanying the MDF in all phases of the projects and providing monitoring and oversight services to the MDF and USAID. Tetra Tech will monitor current processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected infrastructure projects are implemented effectively and in accordance with U.S. and Georgian standards and regulations. Efforts will not duplicate work that MDF does or might perform under its agreement with USAID. The monitoring and oversight role will encompass all areas of project intervention, from procurement planning to final acceptance. It will help to ensure that infrastructure deliverables are effective, efficient, and sustainable and that implementation is carried out within allowable budgets, time restraints, and within accepted quality standards.

2.5 Project Components

The project includes two major components and two subcomponents each (see Figure 1):

1. Component 1: Municipal Infrastructure and Irrigation
 - a. Subcomponent 1: Municipal Infrastructure
 - b. Subcomponent 2: Rehabilitation Of Irrigation Infrastructure
2. Component 2: IDP Durable Housing
 - a. Subcomponent 1: Provide Water And Sanitation Upgrades For IDP Cottage Housing For IDPs From the August 2008 Conflict
 - b. Subcomponent 2: Provide Durable Housing Solutions For IDP From 1990s Conflict

Figure I Project Components



3. MANAGEMENT APPROACH

3.1 Overview and Management

Tetra Tech (Tt) is responsible to USAID for providing oversight related to the identification, verification, and reasonableness of proposed infrastructure development and rehabilitation projects. This includes the verification of work scope quantities, cost/benefit, and other impact analysis for irrigation channels, municipal infrastructure, and housing rehabilitation. Tetra Tech is providing expert advice on the verification and final selection of proposed infrastructure works. Once proposed infrastructure projects are selected, Tetra Tech is responsible for supporting the successful completion all phases of implementation of infrastructure from initial planning through project acceptance. This oversight support is provided to USAID/Georgia or to MDF as directed by USAID/Georgia. It includes the review of MDF's tendering and procurement, feasibility studies, environmental scoping and assessments, design review, construction management, quality control, monitoring, inspection and acceptance, operation and maintenance, and technical training of both MDF and infrastructure recipients (users).

3.2 Project Partners

The GMIP has a number of cooperating partners. The primary partners implement the project on day-to-day basis are USAID/Georgia (USAID), Government of Georgia Municipal Development Fund (MDF), Tetra Tech (Tt), and the MDF feasibility, design, and construction contractors.

Overall responsibilities of each of the project partners are shown in Table I and described below.

Table I: Project Participants Roles and Responsibilities

Partner	Role/Responsibility
United States Agency for International Development (USAID)	<ul style="list-style-type: none">✓ Governance✓ Funding Agency✓ Approval Authority for all deliverables✓ Approval Authority of all financial payments✓ Approval of procurement and administrative processes defined in the TO and ILs✓ Approval of Program contracting steps✓ Approval of Contract Administrative actions✓ Approval of Contractor contract changes✓ Technical Direction of Contracts✓ Responsible for overall Project Management✓ Project selection
Government of Georgia Municipal Development Fund (MDF)	<ul style="list-style-type: none">✓ Procurements of goods and services✓ Overall monitoring and reporting of the project✓ Designing and planning infrastructure activities✓ Performing required works✓ Implementing environmental mitigation practices✓ Developing procurement strategy✓ Implementing procurement✓ Tendering✓ Awarding and managing rehabilitation-related activities that have been outsourced to a contractor✓ Contract administration (cost, scope, schedule)✓ Construction management✓ Site supervision

Partner	Role/Responsibility
	<ul style="list-style-type: none"> ✓ Contract QA/QC ✓ Applying Georgian and applicable USG standards and regulations to all appropriate processes and practices ✓ Closing-out all rehabilitation activities.
Tetra Tech – USAID Contractor	<ul style="list-style-type: none"> ✓ Project management oversight ✓ Environmental studies support ✓ Programmatic Environmental Assessment Comp 3 ✓ Environmental Impact Assessment (for Components 1 and 2 – if required) ✓ Planning Activities ✓ Oversight of procurement ✓ Support and review of bid document preparation ✓ Building MDF capacity ✓ Design review activities ✓ Technical support and oversight ✓ Construction management oversight
MDF Contractors	<ul style="list-style-type: none"> ✓ Environmental scoping ✓ Feasibility studies ✓ Design ✓ Construction supervision ✓ Materials testing ✓ Construction

3.2.1 United States Agency for International Development (USAID):

The funding for the project is provided by USAID. The Task Order Contracting Officer's Representative (COR), Brad Carr (Water, Irrigation, and Infrastructure Advisor, USAID Economic Growth Office) is responsible for managing the program for USAID. He is supported by George Kokochashvili (Engineering Specialist).

At the highest level, USAID coordinates all work planning and construction budgeting with the GoG. USAID/Georgia is managing and implementing the program with the assistance of two main contractors, MDF and Tetra Tech. The contract with Tetra Tech is through a Task Order (TO). The contracts with MDF are through two Implementation Letters (ILs). USAID is responsible for ensuring all contracting processes undertaken under the project are in compliance with specific provisions of the USG Foreign Assistance Act and USAID policies governing USAID-financed project procurement. USAID is doing this through approval of activity designs, review of the general contractor's environmental reports and assessments, site visits, etc.

3.2.2 Government of Georgia Municipal Development Fund (MDF):

MDF is responsible for providing assistance to strengthen the institutional and financial capacity of local government entities. This includes investing in local infrastructure and services, improving the primary economic and social services for the local settlers, developing renewable energy (micro power plants and geothermal) sources, creating a sustainable economic basis for refugees, rehabilitating irrigation and drainage systems, providing low-interest loans to legal entities and physical persons, and providing technical assistance to foreign and Georgian organizations for developing business in Georgia and rehabilitation of war damage. MDF manages projects for provision of temporary and permanent shelters for IDPs. They evaluate the conditions of selected buildings for durable housing schemes and is responsible for the construction and rehabilitation of these buildings as part of the durable housing program.

Under the USAID Improved Economic Infrastructure Program, GoG's Municipal Development Fund (MDF) has been assigned the responsibility to perform the contracting to implement the USAID/Georgia Economic Infrastructure Program for the period of the contract from February 17, 2011 to December 31, 2013 for GMIP I and from December 2013 to December 2014 for GMIP II. MDF is responsible for all development or rehabilitation work including designing and planning infrastructure activities; performing required works; implementing environmental mitigation practices; tendering, awarding, and managing rehabilitation-related activities that have been outsourced to a contractor; applying Georgian and applicable USG Standards and regulations to all appropriate processes and practices; and closing-out all rehabilitation activities. USAID successfully carried out a certification process relating to MDF's financial, technical, and procurement management capacity to perform its responsibilities under this program.

The coordination for MDF activity and its management is conducted by the Supervisory Board, the composition of which is appointed by the Decree of the Government of Georgia. All activities that are jointly supported, and that have prior USAID support to fund will be forwarded to the supervisory committee of the MDF for final approval.

MDF is managed by the Executive Director appointed by the Prime-Minister. MDF's organization is as follows:

- Executive Director;
- Internal Audit Division;
- Administrative Department (Procurement Division, Financial Division, Management Information Systems Division, and Administrative Support Unit);
- Investment and Loans Department (Technical Division, Project Management, and Monitoring and Evaluation Division);
- The Social Investment Department (SID) (Technical Division, Project Management, and Monitoring and Evaluation Division);
- Irrigation Department (, Melioration Associations Division and Technical Division).

MDF is conducting all procurement actions financed under the project in accordance with the World Bank Procurement procedures and the additional USAID procurement requirements provided in the ILs.

MDF will carry out the supervision of all aspects of the implementation of contracts procured under a specific loan/grant, (i.e. technical supervision, contract management, and financial control, payments to contractors and/or suppliers, environmental impact monitoring, etc.). MDF will carry out its supervision either directly through MDF staff or with the assistance of consultants hired by MDF to that effect.

3.2.3 Tetra Tech:

Tetra Tech, under its TO with USAID, is providing support to USAID for oversight and monitoring of MDF's activities.

Tetra Tech is working closely with MDF, accompanying MDF in all phases of the project, and providing monitoring and oversight services to MDF and USAID. Efforts have been made not to duplicate the work MDF does or might perform. The monitoring and oversight role includes all areas of project intervention from procurement planning to final acceptance. It also ensures that infrastructure outputs are effective, efficient, and sustainable and that implementation is carried out within allocated budgets and time restraints. In this role, Tetra Tech oversees adherence to applicable Georgian and USG standards and regulations in the areas of contract award, financial payments, design planning, construction practices and compliance with applicable codes or regulations, including environmental protection and mitigation measures.

Tetra Tech is providing professional assistance across a range of areas such as professional engineering support, planning, procurement, and other technical assistance. Tetra Tech provides design oversight/review, as well as QA/QC oversight of the selected projects.

Project Selection: Tetra Tech provided early support to USAID and MDF to help select projects and ongoing support throughout the implementation process. Tetra Tech and USAID are jointly monitoring current processes and practices, identifying and mitigating areas of risk, and carrying out oversight and quality control efforts to ensure that selected projects are implemented effectively and in accordance with both US and Georgian standards and regulations.

Environmental Clearance: A portion of Tetra Tech's work focuses on the environmental aspects of the program. Tetra Tech's scope includes i) providing oversight for the development of environmental scoping statements for components 1 and 2; ii) providing the programmatic environmental assessment for component 3; and, iii) providing environmental impact assessments for components 1 and 2 if required.

MDF Capacity Building: Tetra Tech has assessed MDF's processes and practices. A gap analysis was conducted in May 2012. Tetra Tech will continue to provide and conduct necessary trainings to MDF in all areas of project implementation, from procurement planning to final acceptance. Tetra Tech will also continue to help ensure that infrastructure outputs are effective, efficient, and sustainable and that implementation is carried out within allowable budgets and time restraints. In this role, Tetra Tech is overseeing adherence to applicable Georgian and US standards and regulations in the areas of contract award, financial payments, design, environmental protection, and mitigation practices.

Design Review Activities: Tetra Tech carries out detailed review of housing and infrastructure designs, plans, and cost estimates for assigned USAID programs and activities including any proposed changes to designs during the course of project implementation. In addition, Tetra Tech ensures that the design products comply with the appropriate national and US standards and best practices.

Technical Support and Oversight: Tetra Tech is providing project management oversight services for contracts/agreements to assure use of engineering and construction best practices for IDP housing and infrastructure development and rehabilitation that include:

1. Reviewing the **feasibility and cost/benefit analyses** for acceptance/rejection decisions based on technical and economic criteria.
2. Providing **technical oversight with respect to implementation staff**, keeping USAID and MDF informed of work progress and implementation issues
3. Ensuring that all interventions are in accordance and **compliance** with appropriate USAID/Georgian **codes and regulations**
4. Supporting and monitoring MDF to insure **compliance with the procurement policies** and procedures specified by agreement between USAID and MDF.
5. Preparing and/or reviewing of reports and work plans, provide recommendations regarding the **viability and cost effectiveness of interventions** and identify alternatives as needed.
6. Monitoring the adequacy, quality and acceptability of delivered goods and services through **construction inspection and surveillance services**, reviewing contractor reports, and meeting with implementation partners.
7. Assisting in the development of **solutions for architecture and engineering** issues that cannot be resolved by the implementers.
8. Reviewing and responding to proposed **changes in design and construction contracts**, the validity of claims, and contract time extensions.
9. Fulfilling **certain administrative responsibilities** including, but not limited to, activities such as estimating expenditures, reviewing payment vouchers, responding to audits, assessing claims, and performing other related activities.

10. Fulfilling **quality control/quality assurance (QA/QC) services**, including materials measurement and services analysis, environmental monitoring, and testing to ensure delivered products are in accord with design specifications and drawings.

3.2.4 MDF Contractors

MDF contractors are selected based on competitive bidding procedures. During the bidding process, contractors are required to present their staffing proposal and organizational structure to meet the needs of the individual projects. Companies are required to have appropriate construction and design capabilities to suit the requirements requested in the bidding documents.

3.2.5 Major Stakeholders

Key Government Organizations:

The Ministry of Internally Displaced Persons from the Occupied Territories, Accommodation and Refugees (MRA) is responsible for Internally Displaced Persons (IDP) to include selection of buildings and beneficiaries for the durable housing program. MRA has regional offices which are responsible for implementing GoG IDP policy in the field. They are involved in program implementation and act as focal points for municipalities.

The Ministry of Regional Development and Infrastructure (MRDI) is responsible for the development, implementation, and coordination of the policy of regional development of Georgia. MRDI coordinates with MRA for selecting buildings for the durable housing schemes, selection of beneficiaries, and coordination of regional project implementation, as well as any coordination with other donors and technical assistance activities.

The Ministry of Agriculture (MOA) is responsible for support of projects from the perspective of agricultural development. Such involvement should enable Georgian citizens to gain maximum agricultural benefit by launching different supportive projects. The Department of Amelioration Scheme Management of the Ministry of Agriculture (MOA) has undergone several reorganizations over the last 10 years. In 2006, the ministry was reorganized into four state owned limited liability companies responsible for operating and maintaining the higher-order irrigation infrastructure. LTD Mtkvari-M, with headquarters in Mtskheta, was responsible for the Saltvisi and Tiriponi irrigation schemes being rehabilitated under GMIP. These particular schemes were managed by the subdivision office based in Gori as well as present in strategic locations in the command area. More recently (April 2012), the four state owned limited liability companies were consolidated back into a single Department of Amelioration. The Gori regional office is still responsible for the main systems of the Tiriponi and Saltvisi schemes.

Local government at the district-level is under the jurisdiction of various municipalities. The municipalities although under the regional governors have been setup to be self-governing. Some of the functions/responsibilities of the municipalities include: managing and disposing of local government property; regulating use of natural resources, protecting the environment; resolving issues of land use in subordinate territories; organizing waste disposal; organizing sanitation, anti-epidemic and veterinary measures; preserving cultural heritage; developing and maintaining power, gas, water supply and land improvement systems; and constructing, maintaining and repairing regional roads.

USAID/Georgia Programs

There are two key USAID programs that offer potential for cooperation and collaboration with GMIP:

The Economic Prosperity Initiative (EPI) is a \$40.4 million program designed to expand market linkages and improve the competitiveness of Georgian agriculture and agri-businesses, manufacturing and service industries to meet market opportunities. EPI is assisting the GoG to broaden and deepen reforms that enhance the environment for business to flourish and that attract greater volumes of foreign investment. GMIP has not done much work with EPI.

New Economic Opportunities (NEO) is a \$20 million program designed to a) improve rural incomes, b) reduce poverty levels, c) improve food security, d) address critical, small-scale household and agricultural water constraints in targeted communities, and, e) enable targeted IDP communities to sustainably maintain their households. It is structured to work primarily at the local level, with some national-level support.

GMIP has been working quite closely with NEO project, particularly with their efforts to form housing and cottage associations. NEO is providing trainings for IDPs who will be settled or resettled in rehabilitated buildings including eight (8) hospitals, 26 collective centers and ten (10) unoccupied buildings. NEO will also target the nine (9) new IDP cottage settlements (in addition to current two (2) with the same approach and will select approximately 90-100 people from there to be trained under vocational education programs. Tetra Tech has assisted in developing lists of types of skills required, one for skilled (with professional background) and one for unskilled workers.

Donor Organizations/NGOs

Donor organizations and NGOs have played major roles in the development of durable housing by providing financial and material assistance and ensuring the proper planning and implementation of humanitarian programs for IDPs. Two of the agencies active in the program include the UN, working through its humanitarian arms of UNOMIG, UNHCR, UNDP, UNICEF, World Food Program, and FAO, as well as USAID with its implementing partner NGOs including Save the Children, IRD Counterpart, CARE, and Mercy Corp. The European Commission Humanitarian Office (ECHO) was a significant donor organization for several years. In 2008 International donors provided USD 219.9 million. GIZ (Formerly GTZ) has also contributed significantly to the improvement of IDP Housing.

The Organization for the Security and Co-operation of Europe (OSCE) conducted an assessment of irrigation in the Shida Kartli Region as part of OSCE's contribution in seeking a solution for avoiding conflict in the region. They have been active in supporting the rehabilitation of Zonkari dam in South Ossetia, which previously supplied water to the Tiriponi Irrigation system under rehabilitation under GMIP.

NGOs such as Norwegian Refugee Council (NRC) have played important roles by supporting other activities, including a) information dissemination and awareness campaigns, b) provision of legal services, and c) implementation of livelihood, agriculture, infrastructure, and housing rehabilitation projects. In the 2008 crisis NGOs played a crucial role in mobilizing resources for the emergency shelter and care of IDPs. Danish Refugee Council is also providing IDP Participant/Resident Outreach Pilot consultant services for the GMIP.

More recently, the Danish Refugee Council has provided support funding to MRA. They are currently implementing a project with MRA called Durable Housing Solutions Framework and it runs the whole of 2011 and 2012. The purpose is to assist MRA in implementing durable housing solutions by assisting in developing and implementing procedures for resettlement, closure of Collective Centers (CC's) and privatization etc. and assisting newly privatized CC in establishing condominiums. It also includes a component for capacity development of MRA.

4. PROJECT WORK PROGRAM

4.1 Project Tasks

The major project Tasks are shown in Table 2. Each of the Tasks and Tetra Tech's roles and responsibilities are described below.

Table 2 Project Phases/Activities

Task	GMIP I Time Period	GMIP I Time Period	Status
Project Selection	May 2011 – Aug 2012	N/A	Completed w/ GMIP I
Environmental Clearances	Jun 2011 – Nov 2012	N/A	Completed w/ GMIP I
Procurement	Sep 2011 – July 2013	July 2013 – Feb 2014	Ongoing
Design/Construction	May 2012 – July 2013	July 2013 – Sept 2014	Ongoing
Capacity Building	Jun 2011 – July 2013m	July 2013 - Dec 2014	Ongoing

4.2 Project Selection

This phase began in May 2011 and was completed in Aug 2012. Table 3 presents the GMIP projects that were selected for implementation and the estimated budgets. Depending on final bid costs, ownership issues and willingness of IDPs to participate (Component 3, Subcomponent 2 Buildings) and USAID funding ceilings, the list of selected projects is subject to adjustment. A map showing the Project locations is shown in Figure 2.

Table 3 Project Selection

#	Comp	Location	Subproject Name	Cost Estimate (USD)	Status
1	1	Dusheti	Rehabilitation of town of Dusheti streets and storm drains (3 km, 8 streets)	851,998	Approved
2	1	Kareli	Rehabilitation of Sogholasheni-Dvani motor road (12 km)	2,365,445	Approved
3	1	Mtskheta	Mtskheta Roads (10.4 km, 32 streets) Rehabilitation of roads for development of infrastructure in Mtskheta Municipality	1,653,129	Approved
4	1	Oni	Oni Roads (2.4 km, 5 streets) Installation of asphalt paving in Town Oni internal roads	894,671	Approved
5	1	Oni	Rehabilitation of water supply in Oni	508,318	Approved
6	1	Gori	Rehabilitation of internal water supply in Gori (122 buildings; 3765 apartments)	1,025,701	Approved but not implemented
7	1	Gori	Rehabilitation of Pushkin St. (0.92 km)	414,538	Approved but not implemented
8	1	Gori	Rehabilitation of road to Gorijvari Saint George Church in Gori (1.45 km)	1,006,568	Approved
		Sub-Total		8,720,368	
9	2	Shida Kartli	Rehabilitation of Tiriponi and Saltvisi Irrigation Systems	8,100,000	Approved
		Sub-Total		8,100,000	
10	3.1	Gori, Kareli, Kaspi, Mtskheta	Rehabilitation of Water Supply Systems for 9 IDP Cottage Settlements	601,226	Approved
11	3.1	Gori, Kareli, Kaspi, Mtskheta	Internal Water Supply, Drainage, and Sanitary Upgrades for 11 IDP Cottage Settlements	5,998,223	Approved
		Sub-Total		6,599,449	
12	3.2	Shida Kartli,	Rehabilitation Works for IDP's Housing (10 Bldgs)	4,757,422	Approved

#	Com p	Location	Subproject Name	Cost Estimate (USD)	Status
		Kvemo Kartli, Imereti			
13	3.2	Imereti, Kakheti, Shida Kartli	Rehabilitation Works for IDP Housing for 8 Former Hospital Buildings	8,930,419	Approved
14	3.2	Imereti, Samegrelo, Zemo Svaneti	Rehabilitation Works for IDP Housing for 28 Collective Centers	11,208,314	Approved
15	3.2	Kutaisi	Design and Construction of New Buildings	957,059	Cancelled
		Sub-Total		25,853,214	
		Total		49,273,031	

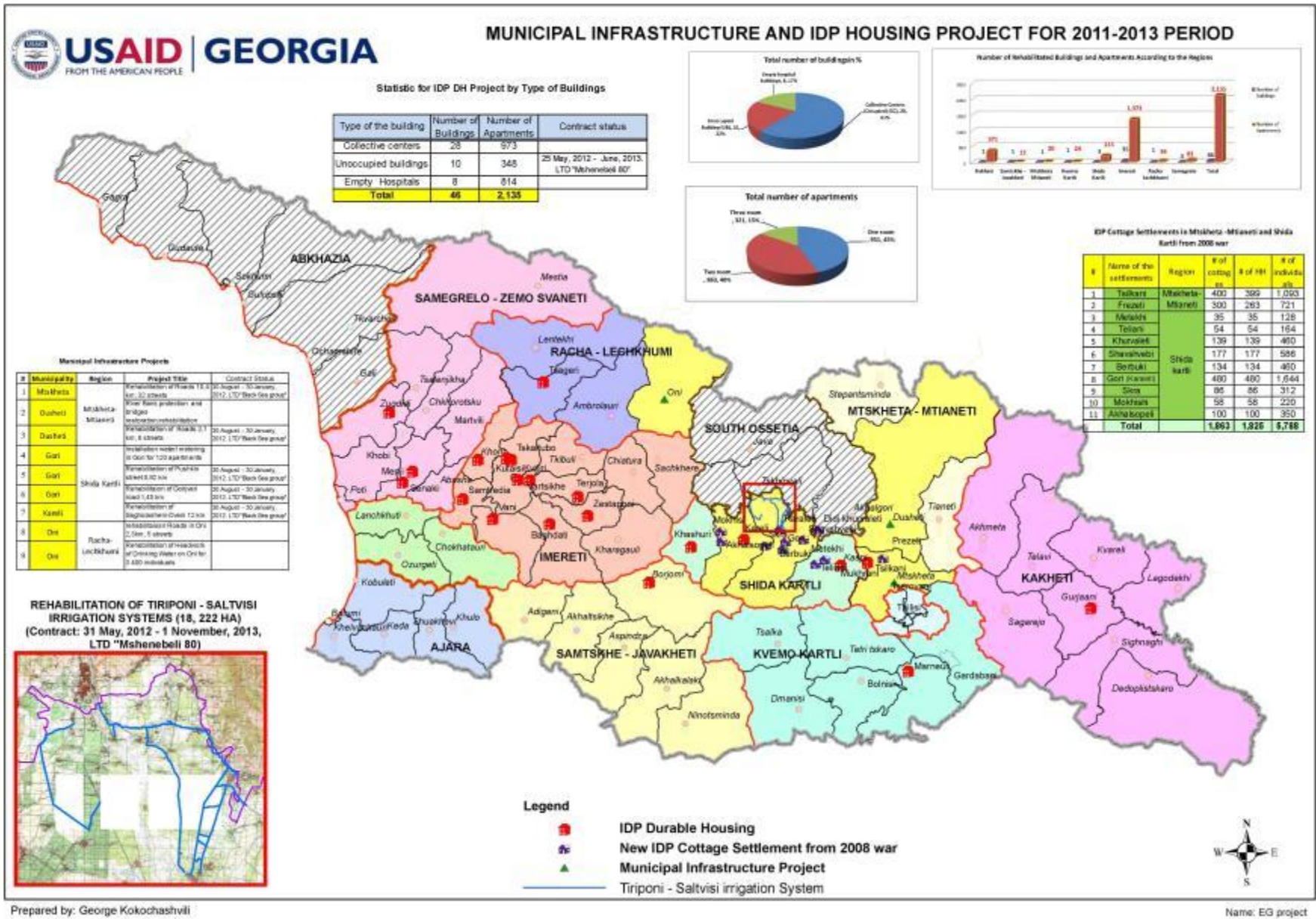


Figure 2 GMIP Project Location Map

4.3 Environmental Clearance

The environmental clearance phase is complete. It began in June 2012 and was completed November 2012. Table 4 presents the status of the environmental clearance process. There are three task order work requirements involving an environmental level of effort:

- A. Environmental Scoping Statements
- B. Programmatic Environmental Assessment
- C. Environmental Impact Assessment (for Components 1 and 2 – if required)

Table 4 Environmental Clearance Status

No	Comp	Item	Action	Status
1	1	Roads	SS, EA	Approved
2	1	Roads addendum	Addendum	Approved
3	1	Flood Protection	SS	SS Approved; Contract cancelled. EA not required
4	1	Water Supply Oni	SS, EA	SS Approved. EA deemed not required.
5	1	Water Supply Gori	IEE Negative Determination with conditions	Approved
6	2	Irrigation	SS, EA	Approved
7	3	IDP Housing	SS, PEA	Approved
8	3.2	IDP Housing with Hospitals	PEA update	Approved
9	3.1	IDP Housing with water supply and drainage	PEA update	Approved
10	3.2	IDP Housing for New Buildings -	PEA Update	Cancelled - Not required

4.4 Procurement

The Procurement Phase is ongoing. It began on September 15, 2011 with GMIP I. Table 5 presents the status of procurement under GMIP with all grey shading* indicating procurements that were either completed or cancelled during GMIP I. Table 6 presents the MDF Project Procurement Plan as of September 2013.

Table 5 Procurements December 2013)

#	Description	Type	Status
	Component 1 (Municipal Infrastructure)		
1*	Rehabilitation of Access Road of Village Gorijvari, Internal Roads in Towns of Gori, Mtskheta, Dusheti, and Municipal Road Sagolasheni – Dvani. USAID/CW/ICB/03-2012	Design-Build	Completed /GMIP I*

#	Description	Type	Status
2*	Rehabilitation of Internal Roads in Town Oni IFB No. USAID/W/ICB/03-L2/I-2012	Design-Build	Completed w/GMIP I*
3*	Rehabilitation works for Install water metering of 122 Housing and regulation valves in Town Gori, "Kombinati Residence" ICB No: USAID/CW/ICB/04-2012	Design-Build	CANCELLED w/ GMIP I*
4	Improvement of water supplying system of town Oni	Construction	Completed w/GMIP II
5*	Preparation of the Detailed Engineering Design, Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for Dusheti Gorge Flood Protection in Dusheti Town RFP No.: USAID/C/QBS/03	Consulting Services (Design/Design Inspection)	Cancelled*
Component 1 (Irrigation)			
6	Rehabilitation Works for Tiriponi and Saltvisi Irrigation Systems ICB No: USAID/W/ICB/02-2012	Design-Build	Completed w/GMIP I*
Component 2 Subcomponent 1: (Cottage Settlements)			
7	Improvement of Drainage/Storm Water Systems (in 7 Villages) and Water Supply Systems (in 9 Villages) for IDP's Cottage Settlements (Gori, Kareli, Kaspi and Mtskheta Districts) ICB No: USAID/CW/ICB/05-2012	Construction	Completed w/GMIP I*
8	Preparation of the Detailed Engineering Design and Bidding Documentation Package and Provision of Design Inspection Services for Internal Water Supply, Drainage, and Sanitary Upgrades for 11 IDP Cottage Settlements	Consulting Services (Design/Design Inspection)	Completed w/GMIP I*
9	Construction Works for Internal Water Supply, Drainage, and Sanitary Upgrades for 11 IDP Cottage Settlements	Construction	To be prepared
Component 2 – Subcomponent 2 (Building rehabilitation)			
11	Rehabilitation Works for IDP's (10) Unoccupied Buildings IFB No. USAID/W/ICB/01-2011	Design-Build	Completed w/GMIP I*
12	Preparation of the Detailed Engineering Design and Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for IDP Housing for Eight (8) Former Hospital Buildings RFP No.: USAID/C/QBS/01	Consulting Services (Design/Design Inspection)	Completed w/GMIP I*
13	Construction Services for Rehabilitation Works for IDP Housing for Eight (8) Former Hospital Buildings	Consulting Services (Construction Management)	Under preparation
14	Rehabilitation Works for IDP Housing for Eight (8) Former Hospital Buildings	Construction	Under preparation
15	Preparation of the Detailed Engineering Design, Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for IDP Housing for Twenty-Six (26) Buildings RFP No.: USAID/C/QBS/02	Consulting Services (Design/Design Inspection)	Completed w/GMIP I - ongoing revision thru a subcontract
16	Construction Services for Rehabilitation Works for IDP Housing for Twenty-Six (26) Buildings	Consulting Services (Construction Management)	Under preparation
17	Rehabilitation Works for IDP Housing Rehabilitation Works for IDP Housing for Twenty-Six (26) Buildings	Construction	Under preparation
18	Preparation of the Detailed Engineering Design, Bidding Documentation Package and Provision of Design Inspection Services for New Buildings for IDP Housing	Consulting Services (Design/Design Inspection)	CANCELLED w/GMIP I*
19	Construction Services for New Buildings for IDP Housing	Consulting Services (Construction Management)	CANCELLED w/GMIP I*
20	New Buildings for IDP Housing Rehabilitation Works for IDP Housing	Construction	CANCELLED w/GMIP I*

Procurement bid documents for construction and/or Requests for Proposal for consulting services completed include:

Two contracts for Feasibility studies and scoping statements were signed in May 2011 and completed in January 2012. Contracts for rehabilitation design-build (DB) of 10 unoccupied buildings for IDP housing and for the irrigation rehabilitation of Tiriponi and Saltvisi systems were signed in May 2012. Two road DB contracts for six (6) road subprojects were signed in August 2012. Tenders for design-build for a water supply project and water metering for 122 buildings in Gori was cancelled in September 2012. One contract for design of Dusheti Gorge Flood Protection in Dusheti Town was cancelled in October 2012 because of funding limitations. Two contracts for the design of buildings for rehabilitation for IDP housing were signed in March 2013. The construction of water supply grade (Improvement of potable water supply in nine (9) villages system improvements for 11 cottage settlements of IDPs: Gori, Kareli, Kaspi and Mtskheta Municipalities) was signed in April 2013. Design for sanitary upgrades, household water supply, and drainage for 11 Cottage Settlements (Drainage, waste water treatment, internal water tap connection, installation of toilets and showers) was signed in July 2013. The Construction Contract for the Oni Water Supply (Improvement of water supply system of the town of Oni) was signed in August 2013.

Procurement bid documents for construction and/or Requests for Proposal for consulting services to be prepared, remaining to be prepared or to be issued under GMIP II include:

Component 1- Subcomponent 1 and 2 (Municipal Infrastructure and Irrigation - N/A

Component 2 – Subcomponent 1 (Cottage Settlements)

1. Construction Contract for sanitary upgrades for 11 cottage settlements (Drainage, waste water treatment, internal water tap connection, installation of toilets and showers)

Component 2 – Subcomponent 2.2 (IDP Buildings)

1. Construction Management for eight (8) Hospitals
2. Construction Contract for eight (8) Hospitals
3. Construction Management for 26 Occupied CCs
4. Construction Contract for 26 Occupied CCs

Table 6 Procurement Plan

No	Component	Sub-Component	Contract No.	Description	Cost (USD)	Actual Contract Price in QEL	Contract Price after Amendment	Contract Type	EOI Issue	EOI Open	RFP/IFB	Bid Due	Contract Period (months)	Contract Signed	Contract Completion	Contractor	Note
1	Municipal Infrastructure	Roads	ICB No. USAID/CW/ICB/03-2012	Rehabilitation of Access Road of Village Goriyani, Internal Roads in Towns of Gori, Mtskheta, Dusheti, Oni, and Municipal Road Sagolasheni – Dvani	7,239,298.75	10,381,269.60	11,984,354.87	DB	N/A	N/A	8-Jun-12	9-Jul-12	9.0	24-Aug-12	15-Jun-13	Black Sea Group	completed Accept. Certificate issue: 01.07.2013
1.1			ICB No. USAID/CW/ICB/03-2012 amendment#3	Additional Archaeological Excavation Works in Dvani		69,612.00		sub-contractor				22-Mar-13		2-Apr-13	17-May-13	Archaeological Association	MOCH acceptance certificate provided
2	Municipal Infrastructure	Roads	IFB No. USAID/W/ICB/03-L2/1-2012	Rehabilitation of Internal Roads in Town of Oni	1,159,492.00	1,476,207.20	1,913,161.42	DB	N/A	N/A	13-Jul-12	3-Aug-12	8.0	11-Sep-12	20-May-13	Arabi 21	Completed Accept. Certificate issue: 13.06.2013
3	Municipal Infrastructure	Water Supply	ICB No. USAID/CW/ICB/06-2013	Rehabilitation of Water Supply Head Works in Town Oni	516,178.74	927,073.65		Construction BoQ	N/A	N/A	16-Mar-13	15-Apr-13	10.0	8-Aug-13	8-Jun-14	NDC Construction Ltd.	under execution
4	Irrigation	Irrigation	ICB No. USAID/CW/ICB/02-2012	Rehabilitation Works for Tiriponi and Saltvisi Irrigation Systems	8,100,000	13,365,000		DB	N/A	N/A	6-Feb-12	26-Mar-12	17.0	31-May-12	1-Nov-13		under execution
5	Irrigation	Irrigation	USAID/C/PC/01-2013	Technical Supervisor (Inspector) of Tiriponi and Saltvisi Irrigation System Rehabilitation Works (MDF)	2,400	1,800		Consulting Lump-Sum	9-Feb-13	14-Feb-13	N/A	N/A	2.0	11-Mar-13	10-May-13	Irakli Chanturia	completed
5.1	Irrigation	Irrigation	USAID	Technical Supervisor (Inspector) of Tiriponi and Saltvisi Irrigation System Rehabilitation Works (USAID)	3,800			Consulting Lump-Sum	9-Feb-13	14-Feb-13	N/A	N/A	3.0	1-Mar-13	30-May-13	D.Janiashvili	Paid by USAID
6	Irrigation	Irrigation	IFB No. USAID/C/PC/01-2013	Concrete Testing with Ultra Sound Device for Tiriponi and Saltvisi Irrigation System	4,242	7,980		Consulting Lump-Sum	6-Mar-13	11-Mar-13	N/A	N/A	0.5	15-Mar-13	1-Apr-13	"Torent" Ltd	completed
7	Irrigation	Irrigation	IFB No. USAID/SSS/03-2013	Concrete Testing with Ultra Sound Device for Tiriponi and Saltvisi Irrigation System	2,462	2,275		Consulting Lump-Sum	N/A	N/A	N/A	N/A	7 days	23-Apr-13	29-Apr-13	"Torent" Ltd	completed
9	IDP Housing	Cottage Settlements	IFB No. USAID/CW/ICB/05-2012	Rehabilitation of Water supply Systems (in 9 villages) and Drainage (storm water) Systems (in 7 villages) for IDP's Settlements (Gori, Qareli, Kaspi and Mtskheta Districts)	1,218,690.00	2,480,976.54		Construction BoQ	N/A	N/A	22-Dec-12	5-Mar-13	6.0	30-Apr-13	30-Oct-13	JV- "JAVAT" & "ERISIMED"	under execution
10	IDP Housing	Cottage Settlements	IFB No. USAID/C/CQS/01-2013	Preparation of Detailed Design of Sanitary Upgrades, Household Water Supply and Drainage for 11 IDP Cottage Settlements	313,240.12	368,100.00		Consulting Lump-Sum (Design)	4-Feb-13	18-Feb-13	2-May-13	20-May-13	5.0	15-Jul-13	15-Dec-13 15 Jul-14	Ecoproject Ltd	under execution
11	IDP Housing	Cottage Settlements	IFP No. USAID/W/ICB/03-2013	Prequalification of construction companies for 11 IDP Cottage Settlements	N/A	N/A	N/A	N/A	N/A	N/A	30-Sep-13	30-Nov-13	N/A	N/A	N/A	Prequalified Applicants	
12	IDP Housing	Cottage Settlements	TBD	Rehabilitation Works for Sanitary Upgrades, Household Water Supply and Drainage for 11 IDP Cottage Settlements	6,264,802			Construction	N/A	N/A	20-Dec-13	20-Jan-13	5.0	20-Mar-14	20-Aug-14	TBD	
13	IDP Housing	Building rehabilitation	IFB No. USAID/W/ICB/01-2011	Rehabilitation Works for IDP's Houses (10 Unoccupied Buildings)	4,965,301	7,849,746.00	11,982,688.23	DB	N/A	N/A	3-Jan-12	10-Feb-12	12.0	25-May-12	15-Oct-13	M&O	under execution
14	IDP Housing	Building rehabilitation	USAID/SSS/01-2013	Survey of Medical Waste at Zestaphoni former central hospital building	450	720.00		Lump-Sum	N/A	N/A	N/A	N/A	7 days	15-Feb-13	21-Feb-13	Sanitari Ltd	completed
14.1	IDP Housing	Building rehabilitation	USAID	Removal of Medical Waste from Zestaphoni former central hospital building				Lump-Sum	N/A	N/A	25-Feb-13	11-Mar-13				TBD	completed
15	IDP Housing	Building rehabilitation	USAID/SSS/02-2013	Survey of Medical Waste at 8 former Hospital Buildings for IDPs		1,534.00		Lump-Sum	N/A	N/A	N/A	N/A	15 days	5-Apr-13	20-Apr-13	Kimiani	completed
16	IDP Housing	Building rehabilitation	UAISATQ/03-2013	Removal of Medical Waste at 7 former Hospital Buildings for IDPs & Hospital's sites	11,000.0	9,950.0		Lump-Sum	15-May-13	21-May-13	N/A	4-Jun-13	20 days	23-Jul-13	12-Aug-13	Kimiani	completed
	IDP Housing	Building rehabilitation		Utilization of Medical, Biological, Chemical Waste from Kutaisi Hospital Building for IDPs Housing	18,200.0	30,000.0		Lump-Sum	N/A	N/A	N/A	N/A	1.0	12-Sep-13	12-Oct-13	Kimiani	under execution
17	IDP Housing	Building rehabilitation	USAID/C/CQS-02	IDP Outreach Pilot Project Services for IDP Housing for Twenty-Eight (28) Buildings	16,000.0	41,050.0	N/A	Lump-Sum	8-Apr-13	12-Apr-13	29-Apr-13	8-May-13	1.0	22-May-13	30-Sep-13	DRC	under execution revision of ToR is needed
18	IDP Housing	Building rehabilitation	TBD (it is planned to use ITQ)	Construction Management Services for Rehabilitation Works for IDP Housing for Eight (8) Former Hospital Buildings and for IDP housing for Twenty-Eight (28) Buildings	969,708			Consulting (LCS) TimeBased(TB)	5-Jun-13	19-Jun-13	25-Sep-13	23-Oct-13	8.0	2-Nov-13	2-Jul-14	TBD	short-list ER by MDF is sent on Aug 13. Tt results of OD is needed
				estimated cost for 8 buildings	430,894												
				estimated cost for 28 buildings	638,812												
19	IDP Housing	Building rehabilitation	IFP No. USAID/W/ICB/01-2013	Prequalification of construction companies for Rehabilitation of 8 former hospital buildings and 28 IDPs Housing	N/A	N/A	N/A	prequalification	N/A	N/A	28-Jun-13	25-Jul-13	N/A	N/A	N/A	Prequalified Applicants	ER prepared by MDF sent on Sep 19. Tt results of OD is needed
20	IDP Housing	Building rehabilitation	USAID/ITQ/01-2012	Preparation of the Detailed Engineering Design and Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for IDP Housing for Eight (8) Former Hospital Buildings	177,821.2	293,404.93		Consulting Services (Design)	N/A	N/A	11-Dec-12	25-Dec-12	6.0	15-Mar-13	27-Sep-13	Georeset	under execution with sub-contractor Artstudio
21	IDP Housing	Building rehabilitation	USAID/ITQ/02-2012	Preparation of the Detailed Engineering Design, Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for IDP Housing for Twenty Eight (28) Buildings	373,085.1	615,590.43		Consulting Services (Design)	N/A	N/A	11-Dec-12	24-Dec-12	6.0	25-Mar-13	21-Sep-13	Artstudio Project	under execution
22	IDP Housing	Building rehabilitation	LOTs TBD	Rehabilitation Works for IDP Housing for Eight (8) Former Hospital Buildings	8,617,870			Construction	N/A	N/A	7-Oct-13	22-Oct-13	8.0	21-Nov-13	19-Jul-14	TBD	
				Lot 1													
				Lot 2													
23	IDP Housing	Building rehabilitation	LOTs TBD	Rehabilitation Works for IDP Housing Rehabilitation Works for IDP Housing for Twenty-Eight (28) Buildings	10,776,242			Construction	N/A	N/A	11-Oct-13	26-Oct-13	8.0	25-Nov-13	23-Jul-14	TBD	
				Lot 3													
				Lot 4													
				Lot 5													
24	IDP Housing	New Building	TBD	Preparation of the Detailed Engineering Design, Bidding Documentation Package and Provision of Design Inspection Services for New Buildings for IDP Housing	-			Consulting Services (Design)	15-Apr-13	8-May-13	21-May-13	2-Jul-13	5.0	1-Aug-13	29-Dec-13	TBD	
25	IDP Housing	New Building	TBD	Construction Services for New Buildings for IDP Housing	-			Consulting Services (CM)	23-Nov-13	14-Dec-13	29-Dec-13	9-Feb-14	8.0	11-Mar-14	6-Nov-14	TBD	
26	IDP Housing	New Building	TBD	New Buildings for IDP Housing Rehabilitation Works for IDP Housing	-			Construction	N/A	N/A	29-Dec-13	9-Feb-14	8.0	11-Mar-14	6-Nov-14	TBD	

The Tetra Tech project team will continue to review and assist MDF in preparation of the procurement documents. The tenders for construction related work largely target local and regional firms although, some international firms have responded to the prequalification process. After completion of advertisement Tetra Tech is assisting MDF with pre-bid conferences. For the tender documentation, the Tetra Tech team's role includes assistance in preparation and review of specifications, TORs, employment requirements, etc. MDF is responsible for ranking, awarding, and contracting. Tetra Tech is responsible, on behalf of USAID, for observing and monitoring this process.

In accordance with USAID requirements Tetra Tech typically reviews the following items:

1. Notice to prospective offerors
2. Lists of prequalified offerors (prior to issuance of the solicitation document)
3. Complete solicitation document (prior to issuance):
4. Contractor selection method (usually part of approval of solicitation document);
5. The selected contractor
6. Any MDF decision to terminate negotiations with the highest ranked offeror and to initiate negotiations with the next ranked offeror or to reject all offerors
7. The contract (prior to execution); and
8. Signed contract before financing.

The general steps in the procurement process are listed in Table 7.

Table 7 Procurement Process

Item	Description	Responsible Organization
1.	RFP/TOR/Bidding Document preparation	MDF with Tetra Tech support
2.	Submission of BD/RFP to USAID	MDF
3.	Clearance of BD/RFP	USAID / Tt
4.	Preparation of EOI/RFP/IFB	MDF
5.	Clearance of EOI/RFP/IFB	USAID/Tt
6.	Publishing Specific Procurement Notice (bidding announcement) on FedBizOps	USAID
7.	Publishing Specific Procurement Notice (bidding announcement) locally	MDF
8.	Pre-Bid Conference	MDF /Tt
9.	Opening of Bids	MDF (public)
10.	Preparation of Evaluation Report and Submission	MDF
11.	Clearance of Evaluation Report	Tt
12.	Contractor Negotiations/Clarifications	MDF
13.	Contractor Due Diligence	Tt
14.	Approval of Contractor	USAID
15.	Submission of Draft Contract	MDF
16.	Clearance of Contract	USAID / Tt
17.	Notification of Award	MDF
18.	Contract Signing	MDF
19.	Clearance of Signed Contract	USAID/Tt

4.5 Design

Design review is required by Tetra Tech for designs prepared by others, designs prepared under GMIP design consulting service contracts, and designs prepared under GMIP DB contracts. The Design Phase is ongoing. It began on September 15, 2011 with GMIP I and is projected to be completed September 2014. Table 5 presents the status of designs under GMIP with all grey shading* indicating reviews completed or cancelled during GMIP I.

Table 8 presents the status of designs to be reviewed and approved by Tetra Tech GMIP.

Because of several decisions—(a) use of DB (b) use of designs prepared under contract with the Georgian Water Utility Company (GWUC) for municipal water supply designs (c) use of designs prepared under a subcontract with Georeset — the design phase under GMIP is different than originally anticipated. However, as specified in the Task Order, Tetra Tech is responsible for carrying out detailed reviews of housing and infrastructure designs, plans, and cost estimates. This includes:

- Supporting and monitoring MDF to ensure compliance with the USAID and MDF procurement policies and procedures.
- Evaluating design products relative to compliance with appropriate national and US standards and best practices.

Specific design activities to be carried out by Tetra Tech include:

1. Whether a DB, direct construction, or the traditional design-bid-build (DBB) will be used, Tetra Tech will review and approve all designs, bill of quantities (BOQs), and technical specifications used in the bid documents.
2. Under DB contracts, Tetra Tech will review all design criteria, design specifications, drawings, and BOQs as part of the DB construction contract.
3. For the direct construction contracts Tetra Tech will review final working/good-for-construction drawings during the mobilization and setting out period. This will include design criteria, design specifications, drawings, and BOQs specified as part of the construction contract.
4. For all construction contracts Tetra Tech will also review and approve in collaboration with the architect of record, design changes during construction, as well as the final as-built drawings prepared by the contractors as required.
5. Tetra Tech will provide assistance in the development of design solutions for architecture and engineering issues that cannot be resolved by the implementers.

Typical design review phases include:

For IDP housing for eight (8) hospitals and twenty-Six (26) buildings:

1. 10% Complete – Pre-Concept, Design Notes, preliminary sketches for approval by MDF
2. 35 % Complete – Preliminary design. Drawings and Specifications for approval by MDF
3. 75% Complete – Draft Detailed Design, Drawings, Specifications, Contract Documents, BOQ, Engineer's Cost Estimate and Construction Schedule
4. 95% Complete - Final Un-Reviewed Detailed Design, all Deliverables for Approval of MDF
 - Design notes
 - Drawings
 - Specifications
 - BOQ
 - Engineer's cost estimate
 - Construction schedule
 - Tender documents
5. 100% all Deliverables after submission of Final Design Inspection Report.

For Design- Build Contracts:

6. Inventory (25%) submittal of design inventory drawings
7. Preliminary (50%) Design Submittal
 - Design analysis, developed to 50%
 - 50% complete drawings
 - Preliminary draft copies of all other design complete submittals
8. Final Un-Reviewed (95%) Design Submittals
 - Complete construction documents plans and specifications at the level of detail needed for bidding the project, including a complete list of BOQs, equipment, and materials.
 - The design analysis in its final form.
 - Draft version of special reports will be submitted.
 - Marked-up specifications. Final draft copies of all other required design complete submittals.
9. Design Complete (100%) Submittal
 - Design analysis, in final 100% complete form
 - 100% complete drawings
 - Final specifications
 - Annotated 95% review comments
 - AutoCAD files of all drawings (applies to all other completion stages 25%, 50% and 95% As well)
 - Electronic Files of 100% complete drawings (applies to all other completion stages)
 - Final Reports of all other design complete submittal

The Design Phase is ongoing. It began on September 15, 2011 with GMIP I and is projected to be completed September 2014. Table 5 presents the status of designs under GMIP with all grey shading* indicating reviews completed or cancelled during GMIP I.

Table 8 Designs to Be Reviewed/Approved by Tetra Tech GMIP

#	Description	Contract Type	Design Review/Approval	Designs
Component 1 (Subcomponent 1.1 Municipal Infrastructure)				
1*	Rehabilitation of Access Road of Village Gorijvari, Internal Roads in Towns of Gori, Mtskheta, Dusheti, and Municipal Road Sagolasheni – Dvani. USAID/CW/ICB/03-2012	DB * *Completed with GMIP I	Required prior to Construction (25%,50%, 95%,100%); Design changes; As-built	1. Gorijvari (1.45 km) 2. Pushkin St. (0.92 km) 3. Mtskheta (10.4 km, 32 st.) 4. Dusheti (3 km, 8 st.) 5. Sagolasheni – Dvani Motorway (12 km)
2*	Rehabilitation of Internal Roads in Town Oni IFB No. USAID/W/ICB/03-L2/1-2012	DB* *Completed with GMIP I	Required prior to Construction (25%,50%, 95%,100%); Design changes; As-built	Oni Roads (2.4 km, 5 streets)
3*	Rehabilitation works for Install water metering of 122 Housing and regulation valves in Town Gori, "Kombinati Residence" ICB No: USAID/CW/ICB/04-2012	CANCELLED* *Cancelled during GMIP I	Required prior to Construction (25%, 50%, 95%,100%); Design changes; As-built	1. 122 buildings; connections to 3765 apartments 2. Pumps (7) 3. Installation of Regulation Valves
4	Improvement of water supplying system of town Oni	Design by JSC "Saktskalproekti" for GUWC Completed during GMIP I	Required prior to IFB (50%; 95%, 100%)	1. Headworks rehab 2. Treatment Facility 3. Chlorination tank 2. Reservoir tank
4	Rehabilitation Works for water supplying system of town Oni ICB No: USAID/CW/ICB/06-2013	Construction	Design changes; As-built	TBD
Component 1 (Subcomponent 1.2 Irrigation)				
6	Rehabilitation Works for Tiriponi and Saltvisi Irrigation Systems ICB No: USAID/W/ICB/02-2012	DB	Required prior to Construction (25%,50%, 95%,100%); Design changes; As-built	20 + sub-projects
Component 2, Subcomponent 1 (Cottage Settlements)				
7*	Design of Potable Water Supply Improvement and Surface Water Drainage for IDP's Settlements in 9 Villages Regional Municipal Infrastructure Development Project (RMIDP/EU/C/CQS/08)	Design by Holinger* *Completed with GMIP I	Required prior to IFB (100%).	Water Supply Systems (9 settlements)
8	Improvement of potable water supply in 9 villages of IDPs (Gori, Kareli, Kaspi and Mtskheta Municipalities) ICB No: USAID/CW/ICB/05-2012	Construction	Design changes; As-built	1. TBD Water Supply Systems (9 settlements) (includes drilling two new wells + pipeline and one well rehab + tank reservoir + pipeline)
9	Design of Internal Water Supply, Drainage, and Sanitary Upgrades for 11 IDP Cottage Settlements IFB No USAID/C/CQS/01-2013	Consulting Services -Design (Design/Design Inspection)	Required prior to Construction (10%,25%,50%, 95%,100%); Design changes; As-built	1. external drainage (7 settlements) 2. cottage gutters (10 settlements) 3. inner water taps and water meter (10 settlements) 4. central WWTF (10

#	Description	Contract Type	Design Review/Approval	Designs
				settlements) 5.sewage network (10 settlements) 6.shower and toilet building with solar heating system (9 settlements)
10	Works for Internal Water Supply, Drainage and Sanitary Upgrades for 11 IDP Cottage Settlements	Construction	Design changes; As-built	TBD
Component 2 (Building rehabilitation)				
11 **	Rehabilitation Works for IDP's Houses – 10 Unoccupied IFB No. USAID/W/ICB/01-2011	DB** Projected completion in early GMIP II 10/15/13	Required prior to Construction (50%, 95%,100%); Design changes; As-built	Buildings (10)
12	Preparation of the Detailed Engineering Design and Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for IDP Housing for Eight (8) Formal Hospital Buildings RFP No.: USAID/C/QBS/01	Consulting Services (Design/Design Inspection)	Required prior to IFB (10%, 35 %, 75%, 95%, 100%)	Buildings (8) GMIP II (8) buildings id'ed are changed
13	Rehabilitation Works for IDP Housing for Eight (8) Formal Hospital Buildings	Construction	Design changes; As-built	TBD
14	Preparation of the Detailed Engineering Design, Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for IDP Housing for Twenty-Eight (26) Buildings RFP No.: USAID/C/QBS/02	Consulting Services (Design/Design Inspection)	Required prior to IFB (10%, 35 %, 75% 95%,100%)	Buildings (26) (2) buildings omitted Scope of (26) changed rehab of unoccupied areas
15	Rehabilitation Works for IDP Housing for Rehabilitation Works for IDP Housing for Twenty-Eight (26) Buildings	Construction	Design changes; As-built	TBD
16	Preparation of the Detailed Engineering Design and Bidding Documentation Package and Provision of Design Inspection Services for New Buildings for IDP Housing	CANCELLED	Required prior to IFB (10%, 35 %, 75% 95%,100%)	Buildings (1-3)
17	New Buildings for IDP Housing	CANCELLED	Design changes; As-built	TBD

4.6 Construction Phase

The Construction began in May 2012 and is projected to run through September 2014. Table 5 presents the status of construction and to be monitored under GMIP with all grey shading* indicating construction completed or cancelled during GMIP I.

Project management oversight, capacity building, and training exercises are conducted by Tetra Tech as per the task order between Tetra Tech and USAID. Management of the construction works is conducted by MDF for the Rehabilitation of the ten (10) unoccupied buildings, irrigation, and roads

contracts. The eight 8 hospital and 26 CC building contracts will be outsourced to construction management firms.

Specific activities to be carried out by Tetra Tech include:

1. Providing technical oversight of implementation staff, keeping USAID and MDF personnel informed of work progress and implementation issues through regular meetings and written communications.
2. Ensuring that all interventions are in accordance and compliance with appropriate USAID and Georgian engineering, architectural, construction, and environmental codes and regulations including, but not limited to, applicable occupation safety, fire codes, and 22 CFR 216.
3. Supporting and monitoring of MDF to insure compliance with the procurement policies and procedures specified by agreement between USAID and MDF. These processes include evaluation of contract modifications.
4. Monitoring the adequacy, quality, and acceptability of delivered goods and services through construction inspection and surveillance services, review of contractor reports, and meetings with implementation partners.
5. Monitoring delivered goods and services through construction observation and surveillance services, review of contractor reports and meetings with implementing partners.
6. Assisting in the development of solutions for architecture and engineering issues that cannot be resolved by the implementers.
7. Reviewing changes to construction contracts; evaluating the validity of claims and contract extensions.
8. Reviewing payment vouchers, responding to audits, and assessing claims.
9. QA/QC services, including materials measurement and services analysis, environmental monitoring, and testing to ensure delivered products are in accordance with design specifications and drawings.
10. Assisting with the close out of completed projects and the project close out report.

Table 9 Construction Contracts to be Monitored by Tetra Tech

#	Description	Contract Type	Construction Period	Works
	Component 1 (Municipal Infrastructure)			
1	Rehabilitation of Access Road of Village Gorijvari, Internal Roads in Towns of Gori, Mtskheta, Dusheti, and Municipal Road Sagolasheni – Dvani. USAID/CW/ICB/03-2012	DB Completed w/GMIP I	Period: 5 months Start: Aug 12 Contract Finish: Jan 13 Finish: May 13	1. Gorijvari (1.45 km) 2. Pushkin St. (0.92 km) 3. Mtskheta (10.4 km, 32 st.) 4. Dusheti (3 km, 8 st.) 5. Sagolasheni – Dvani Motorway (12 km)
2	Rehabilitation of Internal Roads in Town Oni IFB No. USAID/W/ICB/03-L2/I-2012	DB	Period: 5 months Start: Aug 12 Contract Finish: Jan 13 Finish: May 13	Oni Roads (2.4 km, 5 streets)
3	Rehabilitation works for Install water metering of 122 Housing and regulation valves in Town Gori, "Kombinati Residence" ICB No: USAID/CW/ICB/04-2012	DB Cancelled w/GMIP I	Period: 8 months Start: Nov 12 Finish: Jun 13	1. 122 buildings; connections to 3765 apartments 2. Pumps (7) 3. Installation of Regulation Valves
4	Improvement of water supplying system of town Oni	Construction	Period: 4 months Start: Aug 13 Finish: June 14	1. Head works rehab 2. Treatment facility 3. Chlorination tank 4. Reservoir tank
	Component 2 (Irrigation)			

#	Description	Contract Type	Construction Period	Works
5	Rehabilitation Works for Tiriponi and Saltvisi Irrigation Systems ICB No: USAID/W/ICB/02-2012	DB	Period: 17 months Start: Jun 12 Finish: Nov 13 Extension needed	20 sub-projects
	Component 3.1 (Cottage Settlements)			
6	Improvement of potable water supply in 9 villages of IDPs (Gori, Kareli, Kaspi and Mtskheta Municipalities) ICB No: USAID/CW/ICB/05-2012	Construction	Period: 6 months Start: Nov 12 Finish: Oct 13	2. Water Supply Systems (9 settlements) 3. new well + pipeline (1) 4. well rehab + tank reservoir + pipeline (1)
7	Internal Water Supply, Drainage, and Sanitary Upgrades for 10 IDP Cottage Settlements	Construction	Period: 5 months Start: TBD Finish: TBD	1. external drainage (7 settlements) 2. cottage gutters (10 settlements) 3. inner water taps and water meter (10 settlements) 4. central WWTF (10 settlements) 5. sewage network (10 settlements) 6. shower and toilet building with solar heating system (9 settlements)
	Component 3.2 (Building rehabilitation)			
8	Rehabilitation Works for IDP's Houses - 10 Unoccupied IFB No. USAID/W/ICB/01-2011	DB	Period: 12 months Start: May 12 Contract Finish: Jun 13 Projected Completion: Oct 13	Buildings (10)
9	Rehabilitation Works for IDP Housing for Eight (8) Formal Hospital Buildings USAID/ITQ/01-2012	Construction	Period: 12 months Start: TBD Finish: TBD	Buildings (8)
10	Rehabilitation Works for IDP Housing for Rehabilitation Works for IDP Housing for Twenty-Six (26) Buildings USAID/ITQ/02-2012	Construction	Period: 12 months Start: TBD Finish: TBD	Buildings (26)
11	New Buildings for IDP Housing	Construction	Cancelled	Buildings (1-3)

4.7 Capacity Building and Training

In developing this work plan and during the course of the project implementation, Tetra Tech has placed, and will continue to place, capacity building at the forefront of all activities. We work closely with MDF, as well as the construction contractors to develop project-specific capacity through on-the-job training and mentoring. Tetra Tech also supports implementation of training and capacity building for the operators and managers of the newly rehabilitated infrastructure projects. Training consists of classroom, field, and on-the-job training.

The Tetra Tech team is well equipped and prepared to plan and implement a more in-depth, formal, capacity building program under this contract. A gap analysis was conducted in May 2012. It recommended three trainings at three levels – on-the-job, informal internal experience sharing

meetings, and formal workshops. Funding for such training can be nominal and is also project funds well spent. CM training was provided to MDF and construction contractors involved in the GMIP subprojects during GMIP I. Training typically starts with project management and on-site Inspection staff, and then it continues with construction contractor staff. GMIP training is not seen as a one-time event. It is an ongoing process that helps to assure that all staff working on the project in general, and on the project team in particular, can successfully implement, and assure the success of the project's quality goals and requirements.

Several of the subjects where Tetra Tech will continue to provide training over GMIP II is budget dependent but could, based on need, include:

1. Environmental and health and safety issues
2. Document control procedures
3. Preparation of bid documents for USAID
4. Contractor evaluation procedures
5. Design review
6. Construction management supervisor and reporting procedures
7. Financial reporting and contractor cash flow preparation

5. PROJECT SCHEDULE

5.1 General

A project schedule has been developed in MS Project to graphically present the details of the proposed implementation plan and the timelines for the implementation of different tasks, reporting, and planning activities. The schedule is included as an Annex I.

5.1.1 General Assumptions

The Project Schedule incorporates the following assumptions:

- The Project term for GMIP I was May 23, 2011 through July 28, 2013.
- Tetra Tech TO start date was July 29, 2013.
- Tetra Tech TO Completion Date for GMIP II is December 31, 2014.
- Project task durations are shown in working days.
- The schedule does not consider US or Georgian holidays as non-working days.
- The schedule includes tasks associated with the currently assigned activities. The schedule will be adjusted on a regular basis throughout the life of project.
- All reviewing authorities USAID, GoG, and others are expected to provide comments within 5-10 working days of receipt of documents, unless otherwise specified in the schedule.

5.1.2 Maintenance and Tracking of Project Schedule and Tasks

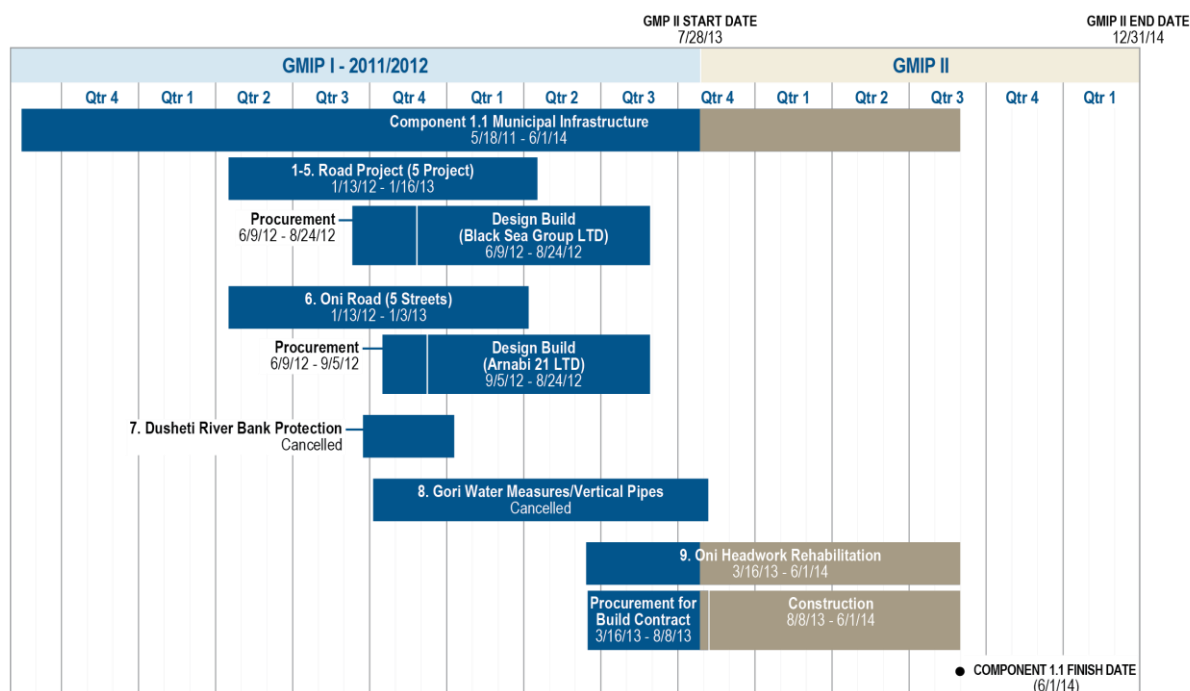
Tetra Tech uses MS Project as the tool for planning, management, and scheduling to help define critical-path schedules based on obtainable milestones to achieve deliverable dates. A master schedule was prepared by USAID. The schedule is maintained by Tetra Tech and updated weekly with assistance from USAID. It is included in the quarterly progress reports. Any events that substantially impact the project schedule are updated and discussed with the COTR at the bi-weekly meetings, or sooner if needed, and highlighted in the quarterly report.

5.2 Component I: Municipal Infrastructure and Irrigation

Under Subcomponent I.1, seven subprojects are being implemented: six road projects, one water supply project for a total of USD 7280129. The six road sub-projects were implemented under two DB contracts and were completed in May 2013 during GMIP I.

1. Rehabilitation of Access Road of Village Gorijvari, Internal Roads in Towns of Gori, Mtskheta, Dusheti, and Municipal Road Sagolasheni – Dvani. (ICB No: USAID/CW/ICB/03-2012) with Black Sea Group LTD for USD 7,239,298.75. Construction began in August 2012 and was completed in May 2013.
2. Rehabilitation of Internal Roads in the Town of Oni (ICB No: USAID/CW/ICB/03-2012) with Arnabi 21 for USD 1,159,492 began in August 2012 and was completed in May 2013.
1. One water supply project is being implemented with a DBB contract: Rehabilitation of water supply head works in town of Oni. The designs were prepared by GUWC under GOG financing. The New Development Company Construction Ltd (NDC) is providing the construction under a contract for USD 516178.736 which was signed on August 8, 2013 and is scheduled for completion by June 1, 2014.

Figure 3 Component I Municipal Infrastructure Schedule



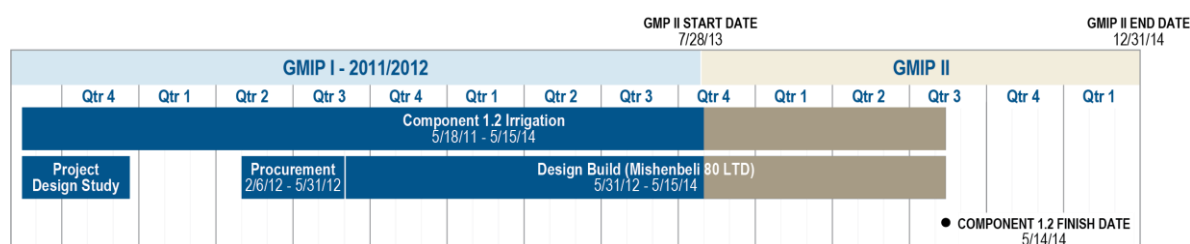
Component I, Subcomponent 1.2 Irrigation

Under Subcomponent 1.2 Irrigation two subprojects known as the Saltvisi and Tiriponi Canal systems are being implemented under a single DBcontract for a total of USD 8,100,000.

The seventeen (17) month design build contract is with Mshenebeli 80 Ltd (M-80). The project start date was established as June 7, 2012 (seven days after contract signature), and the completion date was specified as November 1, 2013. Designs are being carried out by the “Saktskalproekti” JSC under a sub-contract.

After one (1) year of implementation - approximately 75% of the duration, only one- third (1/3) of the project was recognized as being completed. It is apparent that M-80 will not be able to meet the November 1, 2013 completion date and that a time extension will be requested. Other challenges identified by the program management team have determined that the project is at risk for incompletion even though the scope has been reduced. Assuming all issues will be resolved and that a time extension is granted we have assumed completion of the remaining GMIP rehabilitation work will coincide with the start of the Irrigation season and the filling of the canals on May 15, 2014. The final project costs are still to be determined.

Figure 4 Component 2 Irrigation Schedule



5.3 Component 2, Subcomponent 1 Cottage Settlements

Under the IDP durable housing component for Cottage settlements USAID is committed to provide both water and sanitary upgrades to the cottage settlements where they are feasible and needed. The total USAID budget available for this component is USD 8,603,409. USAID has funded external water supply improvements for nine (9) communities, external drainage for seven (7) communities, local cottage drainage for eight (8) communities, internal water supply hook-ups for 11 communities, shower and toilet systems for nine (9) communities, and waste water treatments systems and collection systems for ten communities.

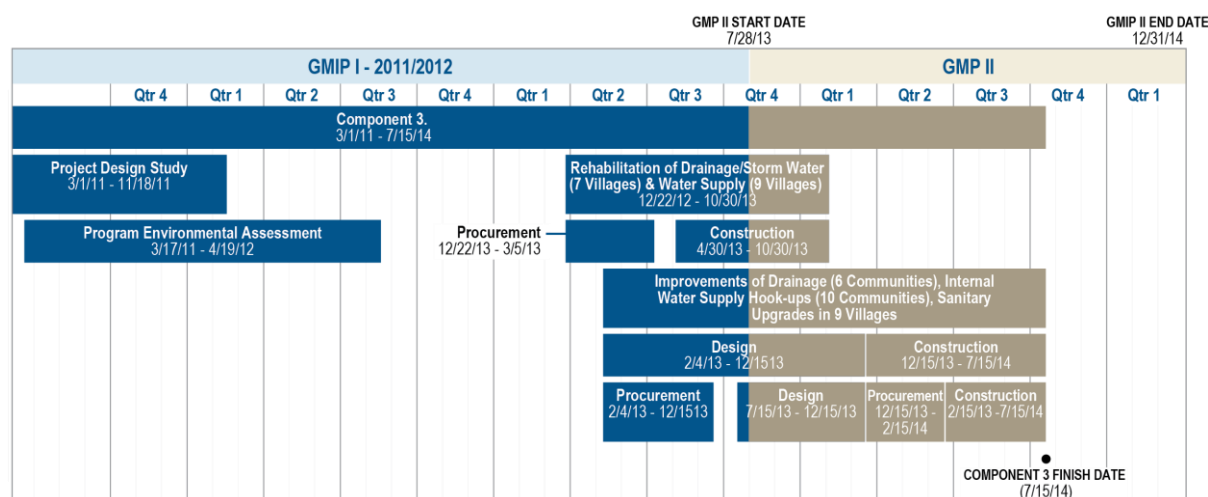
Two contracts have been implemented:

The construction of improvements for Improvement of potable water supply in nine (9) villages system improvements for 11 Cottage Settlements of IDPs: Gori, Kareli, Kaspi and Mtskheta Municipalities) was signed with a Joint Venture of Java Ltd and Erisimedi JSC JV for USD 1,218,690 in April 2013. Construction completion is scheduled for July 15, 2014.

The design for Sanitary Upgrades, Household water supply and drainage for 11 Cottage Settlements (Drainage, waste water treatment, internal water tap connection, installation of toilets and showers) was signed with Ecoproject Ltd for USD 313,240 in July 2013. Design duration is five months, resulting in a completion date of December 15, 2013 at which time a Construction tender is scheduled.

The construction contract for water supply will be a six-month contract. It is expected to start in February 2014 after a competitive bid period and projected to be completed by July 15, 2014.

Figure 5 Component 2 - Subcomponent 2.1 Cottage Settlements Schedule



5.4 Component 2 – Subcomponent 2.2 IDP Buildings

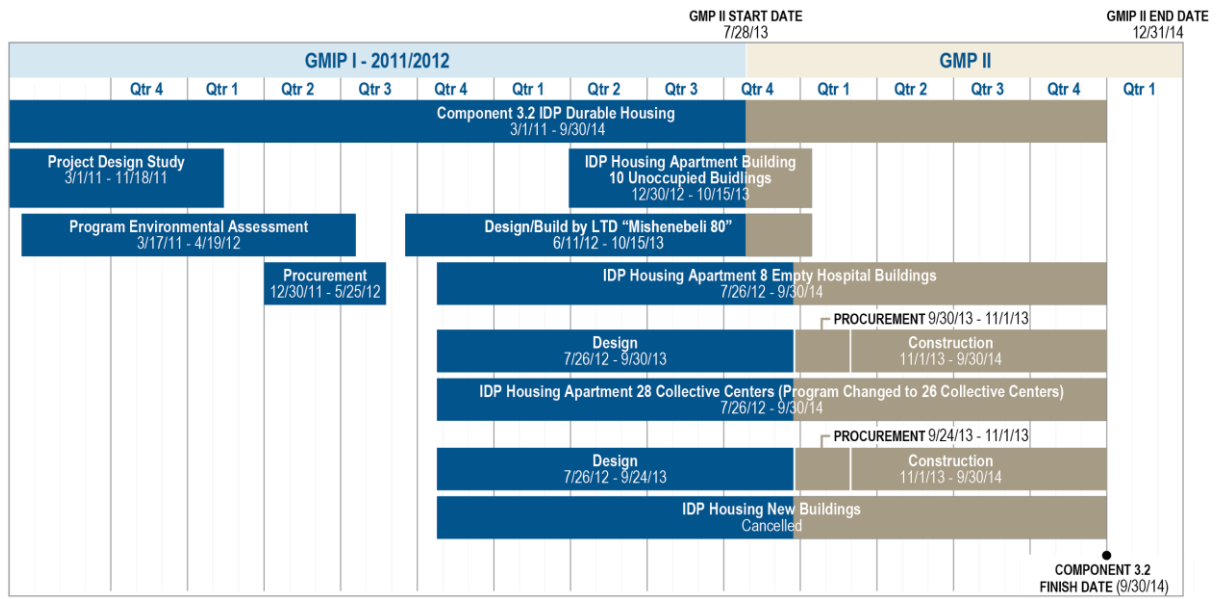
Under the IDP durable housing component ten (10) unoccupied buildings, eight (8) hospitals and 26 collective centers have been selected for rehabilitation. The selection process to add other potential buildings to be rehabilitated has been cancelled due to schedule constraints. The possibility of constructing new apartment buildings was considered per GOG request however schedule constraints also became an obstacle. The works are being implemented under different types of DB and DBB contracts. Total costs made available for this component are USD 25,855,374.

The contract for the rehabilitation works for IDP Housing (10 Bldgs), ICB No: USAID/W/ICB/01-2011, was signed with Mshenebeli 80 Ltd in May 2012. It was issued as DB contract. It is a twelve (12) month contract and was expected to be completed in June 2013. Many issues have delayed this completion date which is now scheduled for October 15, 2103. The total current costs of the contract is USD 6,180,477, additional amendments are expected.

The contract for the Rehabilitation Works for IDP Housing (8 Hospitals) USAID/ITQ/01-2012 was signed on March 15, 2013 with Georeset Ltd. for USD117,947. Scope has changed and the contract amount has been increased to \$177, 821.20. The contract was issued as a DBB. According to the contract terms, the design completion is scheduled for August 2013. The contract assumed a two (2) month period for bid preparation and contractor selection and had a projected 12 month construction period which ended in an October 2014 completion date. Georeset is behind schedule and with the added scope an October 31, 2013 design completion date is now projected. This has put this project behind schedule. Although a contractor prequalification process is currently being conducted which should shorten the two (2) month assumed bid preparation, schedule constraints for construction are apparent. Since all construction contracts must be closed out and financially reconciled by September 30, 2014 the estimated construction period is now compressed to eight (8) months, from November 15, 2103 to July 15, 2013. There is also a procurement process ongoing to select a construction management firm that will run the duration of the construction program.

The contract for the rehabilitation works for IDP Housing (28 CC) USAID/ITQ/02-2012 was signed on March 25, 2013 with Art Studio for USD 373,066. Scope has changed and the contract amount has been increased to USD 455,600.77. According to the contract terms, the design completion is scheduled for August 2013. The contract assumed a two (2) month period for bid preparation and contractor selection and had a projected 12 month construction period which will end with an October 2014 completion date. The scope that has been added has resulted in a revised projected completion date of October 31, 2013. Although a contractor prequalification process is currently being conducted which should shorten the two (2) month assumed bid preparation, schedule constraints for construction are apparent. Since all construction contracts must be closed out and financially reconciled by September 30, 2014 the estimated construction period is now compressed to eight (8) months, from November 15, 2103 to July 15, 2013. There is also a procurement process ongoing to select a construction management firm that will run the duration of the construction program.

Figure 6 Component 2 – Subcomponent 2 IDP Building Schedule



6. TETRA TECH STAFFING PLAN

6.1 General

Tetra Tech is responsible for providing USAID and its implementing partners at MDF immediate access to a team of full-time and short-term technical assistance that includes all related fields of expertise required for successful oversight of implementation of Components 1 and 2 of the Task Order. Tetra Tech has retained the majority of the GMIP I qualified professional team of technical specialists to meet USAID's and the GoG's needs for the project. Required technical assistance spans the full range of expert engineering advice and oversight, organizational capacity building expertise, and the provision of analytical and technical support to USAID. The Tetra Tech team has been structured to provide technical assistance, oversight, and quality control for building assessment and evaluation, engineering planning and design, and QA/QC planning. This expertise includes procurement management, engineering management, engineering, environmental science, construction management, monitoring, inspection, and technical training.

The staffing plan is designed to ensure successful implementation of Tetra Tech's technical approach. It seeks to maintain flexibility in response to evolving project needs and to provide additional resources to address fluctuations in workload. The Work Plan is designed to be responsive to the logistical and administrative challenges posed by concurrently implementing rehabilitation and infrastructure projects.

Tetra Tech has played a more critical and important role in project oversight than initially anticipated. Specific areas that have required additional effort have included:

1. Preparation of environmental assessments
2. Procurement preparation and review
3. Detailed design review
4. Construction management over site
5. QA/QC compliance
6. Document control
7. MDF financial invoice reviews
8. Project performance monitoring

At the request of USAID, Tetra Tech adjusted its staff and level of effort during GMIP I and now in transition from GMIP I to the LOE and budget approved with the Contract No. AID-EDH-I-00-08-00027-00 Task Order No: AID-114-TO-13-00005. In response to USAID's further request to re-evaluate the fluctuating project conditions after our July 29, 2103 start-up, a budget realignment was submitted for consideration with the Project Rapid Appraisal Report. This work plan is based on the proposed budget realignment currently under consideration by USAID.

The Tetra Tech staffing plan includes a combination of long term (LTTA) staff including Glen Wills (COP) and Andrew High (DCOP) with Home Office short term (STTA) expat support from Technical Advisor, Marjory O'Brien, who served as the COP during the last phase of GMIP I and the initial GMIP II transition. CCN administrative and technical personnel are also included and are based in the Tetra Tech Tbilisi and the Kutasi office to provide monitoring and oversight for the projects spread across the central and western parts of Georgia. The Tetra Tech Tbilisi project office is adjacent to MDF. Day-to-day project activities are managed from this office. A regional office was opened in Kutaisi in March 2012 which will remain open through the duration of GMIP II. Short term (STTA) expat and local technical assistance (CCN) are organized into several support teams distributed between Component 1 and Component 2 according to the revised and projected technical needs of GMIP II. Additional support, oversight and management are provided by Tetra Tech home office staff as needed as well as support required from expat short term technical assistance (STTA). This mechanism provides technical resources for short term (two (2) to four (4) week or longer) assignments by additional Tetra Tech technical specialists from the US to augment

the in-country team, as required. Sixty (60) days of STTA LOE has been included in the budget realignment to provide the ability to respond to a specific need and to focus on complex technical issues and staff surge requirements. An additional thirty (30) days have been included for a closeout specialist for required closeout activities at the end of GMIP II. STTA international travel requests have been, and will continue to be, submitted to the COR for approval with detailed justification prior to mobilization.

The current Tetra Tech staffing plan is shown in Figure 7 below. The roles of the Tetra Tech Key Personnel are included as an Annex 2. A detailed table showing the proposed Level of Effort (LOE) for the GMIP II project is shown in Annex 3. A summary is presented in Table 10 below.

Table 10 GMIP II LOE Summary

Item	Description	Year 1	Year 2	Total
1	EM Home Office Support	11	10	21
2	Short-Term U.S. Tetra Tech CIG Home Office Employees	45	15	60
3	Long-Term U.S./TCN Employees	510	128	638
4	Short-Term U.S./TCN Employees	40	30	70
6	ES Office Support	15	20	35
7	CCNs Consultants Long Term	3,765	960	4,725
8	Short Term CCN Labor	395	60	455
	Total	4,781	1,223	6,004

6.2 Budget

The Tetra Tech Task Order for GMIP II is for approximately seventeen (17) months beginning July 29, 2013 and ending December 31, 2014. The approved project LOE and budget approved with the Contract No. AID-EDH-I-00-08-00027-00 Task Order No: AID-I 14-TO-I3-00005 is \$2,899,935.

On September 12, 2013, Tetra Tech submitted a proposed budget realignment for consideration as an attachment to the Rapid Appraisal Report.

Table 11 shows the differences in the two budgets.

Table 11 Budget Realignment

Year	Original (USD)		Budget Realignment (USD)		Original vs. Realignment Difference (%)
	Total	Average Monthly Burn rate	Total	Average Monthly Burn rate	

Total Budget	2,899,935	170,584	2,893,072	170,181	0.24% Decrease
Year 1 (7/29/13 – 7/28/14)	2,222,763	185,230	2,298,835	191,570	3.42% Increase
Year 2 (7/29/14 – 12/31/14)	677,172	135,434	594,236	118,847	12.25% Decrease

The proposed budget realignment was prompted by notification from USAID that all expenditures under the program must be reconciled and paid for by September 30, 2014. To meet this schedule requirement and to adjust to the changing needs of the project, we shifted LOE from year 2 to year 1 and have assumed that we will begin reducing staff based on specific subcomponent project needs starting in July 2014 and through the final five months of the project.

Figure 7 Tetra Tech Organization Chart

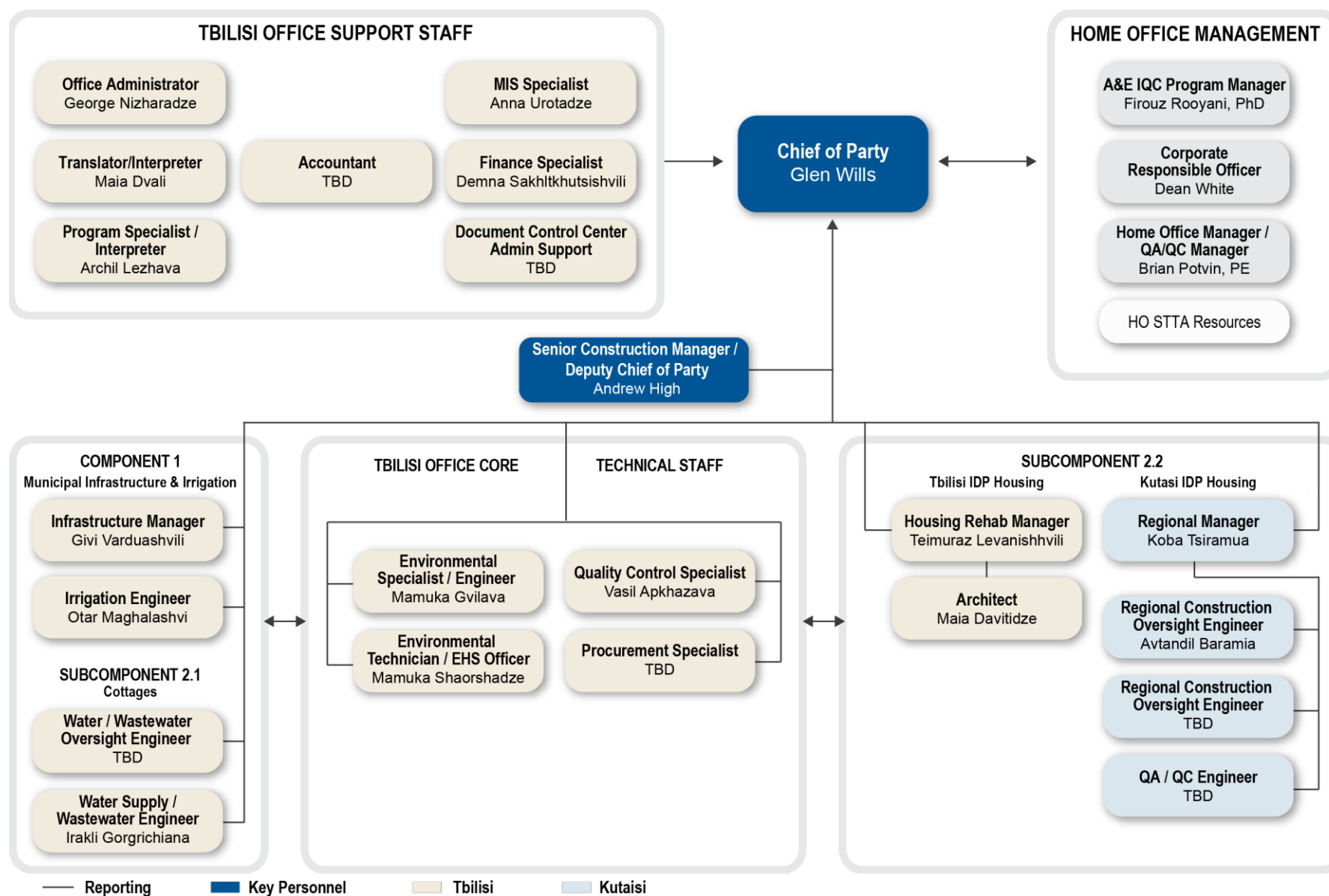
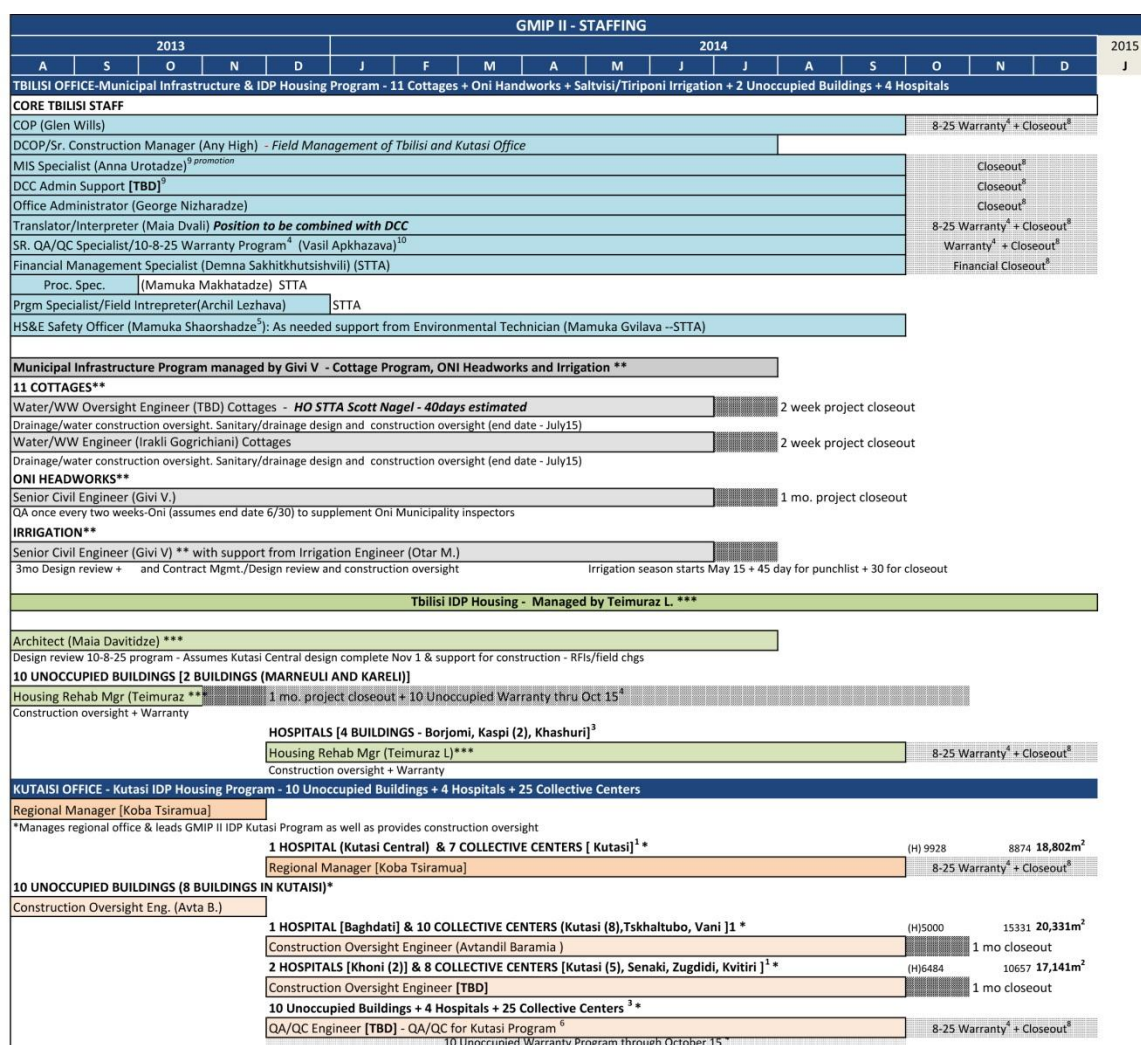


Figure 8 Personnel Assignments



Notes:

1. Construction QA supplements Construction Supervision. Assumes that each building is visited once every two weeks for the duration of construction. Rotating schedule between 2 construction oversight engineers & 1 QA/QC Engineer with Management provided by Koba Tsiramua.
2. Dates are based on current or assumed contracts and schedules.
3. Assumes Khashuri is cleared of occupants by August 31, 2013 and building remains in program.
4. One year Warranty & Closeout program will be developed for 10 Unoccupied and will overlap with 8 Hospitals & 25 Collective Centers.
5. Health and safety training and SMEEPs inspections for entire program by Mamuka Shaorshadze from Tbilisi.
6. Tt QA role in Kutasi is assumed to be reduced from LOE in Tbilisi due to Construction Mgmt/Supervision contract for 8 & 25.
7. Expat STTA support is anticipated on as needed basis. 40 Days are included for budgeting purposes.
8. Tt Closeout will be conducted during last 60 days of contract [Nov 2014-Dec 2014]. Closeout Expat Specialist Jessica Harris is proposed.
9. A promotion is proposed for Anna Urotadze to Manager of Information Systems Specialist. She will train and oversee the new dcc specialist and lead the community outreach, focus groups, and inauguration program.
10. A promotion to Sr QA/QC Specialist is proposed for Vasil.

6.3 Tbilisi Office Project Management Team

GMIP is managed from the Tetra Tech project office in Tbilisi under the direction of the Chief of Party (COP), Glen Wills. The COP is the single direct point of contact for the Mission. He is the central interface among all project team members and stakeholders providing all day-to-day program management, administration, and oversight functions. He is assisted by Andrew High, Deputy Chief of Party (DCOP).

6.4 USA Home Office Support Team

The Tetra Tech Home Office team members provide management, technical and contractual support to the in-country team.

For management support the key persons are:

- Firouz Rooyani, A-E IQC Program Manager
- Brian Potvin, Task Order Manager and QA/QC
- Dean White, Corporate Responsible Officer

An added benefit is the ability of Tetra Tech to provide Marjory O'Brien as Technical Advisor from our home office. Marjory served as the COP during the last phase of GMIP I and brings history and institution knowledge of the project. Additional support, oversight, and management is provided by the Tetra Tech home office as needed.

Home office reach back support provides a cost-effective means of efficiently accessing essential, but unique and limited, engineering expertise needed for accurate and high quality project designs.

Home office support is provided through e-mail correspondence, technical consultations, and sharing of designs and issues. This eliminates the inefficient time and expense of mobilizing expertise to the field for relatively limited, project-specific engineering applications. In anticipation of these additional needs, additional home office support staff approvals have been requested through USAID in many technical areas in order to allow for flexibility and quick responses to project technical needs as they arise – including additional STTA needs.

6.5 Tbilisi Office Management/Administrative Support Team

This team supports all administrative and office operations. This includes maintaining local filing system, managing office expenditures, local procurement, translations, training coordination, public awareness, IT support, organizing transportation, etc.

6.6 Tbilisi and Regional Engineering Oversight Technical Team

The Technical Oversight team is responsible for supporting the project selection process, procurement bid document preparation, design review, and construction management QA.

Project selection. Tetra Tech will continue to use LTТА and STТА technical staff throughout the project selection phase. Tetra Tech staff have reviewed project planning and feasibility documents and conducted site visits to verify costs as well as technical and economic feasibility of proposed sub-projects. These activities are not anticipated to continue as it is understood that there is now agreement on the final list of sub-projects. However, this support can be made available if further need arises.

Procurement. Tetra Tech will also use LTТА and STТА technical staff to support the procurement phase. Tetra Tech technical staff will assist in providing support to MDF and will review bid documents that include such items as technical specifications, BOQs, and design drawings.

Design review. Design reviews are being conducted locally with our CCN IDP Housing Rehabilitation Manager in conjunction with our CNN Architect. Because of the diversified and short-term requirements of the design review and modification process, the Tetra Tech Home Office can also be made available as we have a pool of experienced engineers that can be used for short duration home office assignments on a case by case basis as budget allows and to be approved by the COR.

Construction Management and Quality Assurance (QA). This group is supervised by the DCOP. One technical Oversight Team operates out of Tbilisi and one operates out of a regional office established in Kutaisi as depicted on the Organization Chart, (Figure 7). The Technical Engineering Team has experts to provide guidance in the technical aspects of GMIP work out in the field sites, including roads, irrigation, buildings, design, construction management, water and

wastewater, and QA. These persons are full time engineers responsible for providing oversight and monitoring of construction activities. All teams are supported by expat and local STTA as required. Each subcomponent project has a contract manager. One engineer is responsible for covering a maximum of one or two contracts.

Regional Office. A Regional Office was established in Kutaisi under GMIP I. The direction of work in Kutaisi is facilitated by the Tetra Tech Regional Engineer. He is responsible for supervising office operations as well as participating in the regional construction QA activities. The budget realignment includes two full time construction oversight engineers plus the Regional Engineer engaged in the day to day monitoring and oversight. A specific QA/QC Engineer is also included to conduct QA monitoring for the entire Kutaisi program. It is assumed that the construction load at any one time for the first year for the durable housing buildings could be up to 30 buildings plus warranty oversight for the 10 unoccupied comprised of the majority of the 10+8+ 26 IDP Program located in and in close proximity to Kutaisi. It is also understood that this program will be under the direct supervision of a separate Construction Management firm under contract with MDF.

6.7 Contract Administration Oversight Team:

The Contracts Administrative Oversight Team provides competence and expertise in procurement, finance, and document control. The contract administrative team is led by the COP, supported by the DCOP and LTAA and STTA staff. This group is responsible for assisting in the preparation and review of all procurement documents. They also review and monitor all proposed contracts and changes by MDF and its contractors. The team has established and maintains a project document control center.

6.8 Environmental Support Team:

The environmental EA/PEA technical work will be led by local Mamuka Shaorshadze (Tetra Tech local Environmental, Health and Safety Specialist) supported by STTA, Mamuka Gvilava, on as needed basis. The majority of the work on the environmental clearances has been completed. Capacity building and training will continue throughout the project and will largely be supported by STTA with assistance from the long term support staff.

7. TETRA TECH OVERSIGHT AND MONITORING PLAN

7.1 Project Management Plan

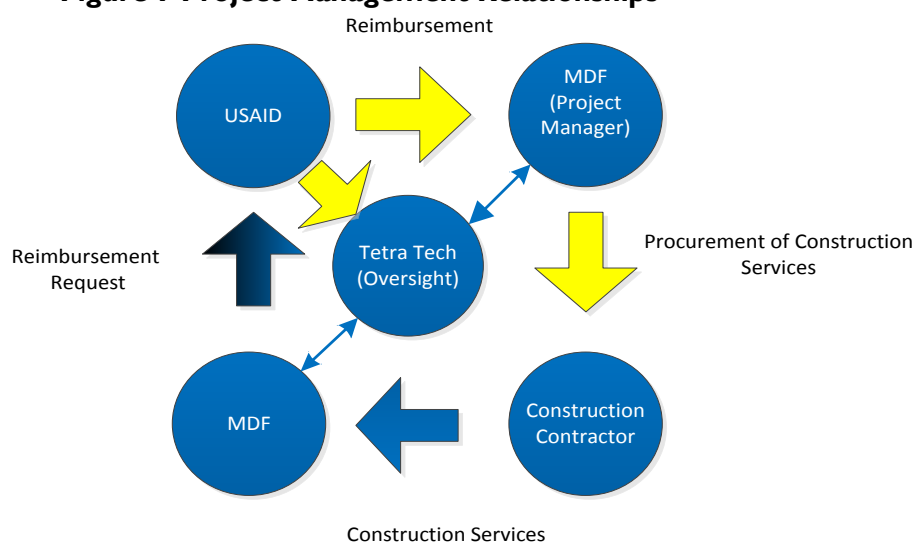
Under a host country (HC) contract, USAID finances, but is not a party to, contractual arrangements between the HC and the supplier of goods and/or service. USAID does have approval right for the contracting process throughout the project's implementation. Tetra Tech is providing oversight for this process.

Tetra Tech's oversight and monitoring responsibilities cover project activities that include:

- Awarding contracts e.g., preparing requests for proposals, tendering, review of proposals, technical evaluation, cost evaluation, determining competitive range, selection, and contract award with a focus on ensuring that practices reflect Georgian procurement legislation and applicable USG statutory requirements, such as source and origin regulations.
- Payments for services rendered or delivered e.g., methodology of validating invoices for services rendered or delivered.
- Close out of completed projects e.g., financial and payments reconciliation, reconciliation of services delivered to design specifications, methodology to address outstanding issues.

Advice and recommendations for approval/disapproval are communicated to MDF and USAID/Georgia through written reports as required.

Figure 9 Project Management Relationships



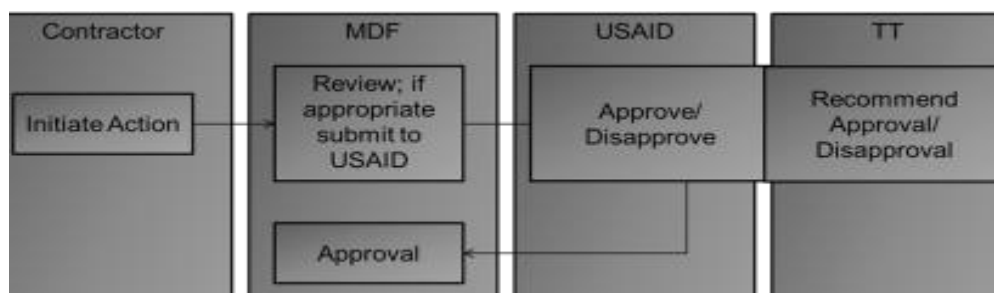
7.2 Design/Construction Management Plan

This section presents a summary of the Project Design/Construction Management Plan. The purpose of the plan is to ensure that the original contract price, schedule and scope of work are followed properly. This requires that roles and responsibilities of all participating parties are clearly defined. This is very important in dealing with changes during the work period. This plan was prepared in May 2012 and updated in July 2012 by Tetra Tech (Quality Management System – QA/QC Plan, July 2102). The Plan has been translated into the Georgian language and provided to MDF and is also being utilized by MDF and Tetra Tech staff on GMIP II. It will require revisions to accommodate the added Construction Management organization.

7.2.1 Parties

The project is managed by the main partners USAID, MDF, and Tetra Tech. The tasks and responsibilities of each party are defined by various legal documents. MDF selects contractors and signs contracts based on competitive bidding procedures. The contractor initiates actions; MDF decides if change/correction is appropriate; MDF sends to USAID through Tetra Tech for approval; Tetra Tech reviews and recommends approval/disapproval; USAID approves/disapproves. Tetra Tech informs MDF of the decision; MDF then informs the contractor; the contractor then can proceed.

Figure 10 Approval Process



7.2.2 Types of Works

Based on the current developments and preliminary agreements between USAID and MDF, there are several types of contracts – traditional DBB, DB, and direct Construction.

DBB is the traditional method of contracting. A design firm is contracted to prepare the designs and tender documents. The construction contractor then is selected competitively under a separate procurement. In some cases the design contractor may also be contracted to carry out construction management services.

DB contracts have been used for several of the subprojects to fast track construction efforts. The design and construction activities can proceed at the same time.

Where design drawings and costs are available with sufficient accuracy to prepare tender documents and the scope of work is more defined and does not require consideration of alternative solutions, the project will move directly to procurement for construction. Construction contractors are required to prepare detailed working drawings, good for construction, immediately after award of the contract.

7.2.3 MDF Project Management Structure

MDF is responsible for the supervision of all aspects of the implementation of contracts procured under a specific loan/grant (i.e. technical supervision, contract management and financial control, payments to contractors and/or suppliers, environmental impact monitoring, etc. MDF is performing its supervision either directly through MDF staff or with the assistance of consultants hired by MDF. Costs of MDF supervision staff is the responsibility of MDF as part of its operating costs. The costs for construction management consulting services procured by MDF will be covered by USAID project funds.

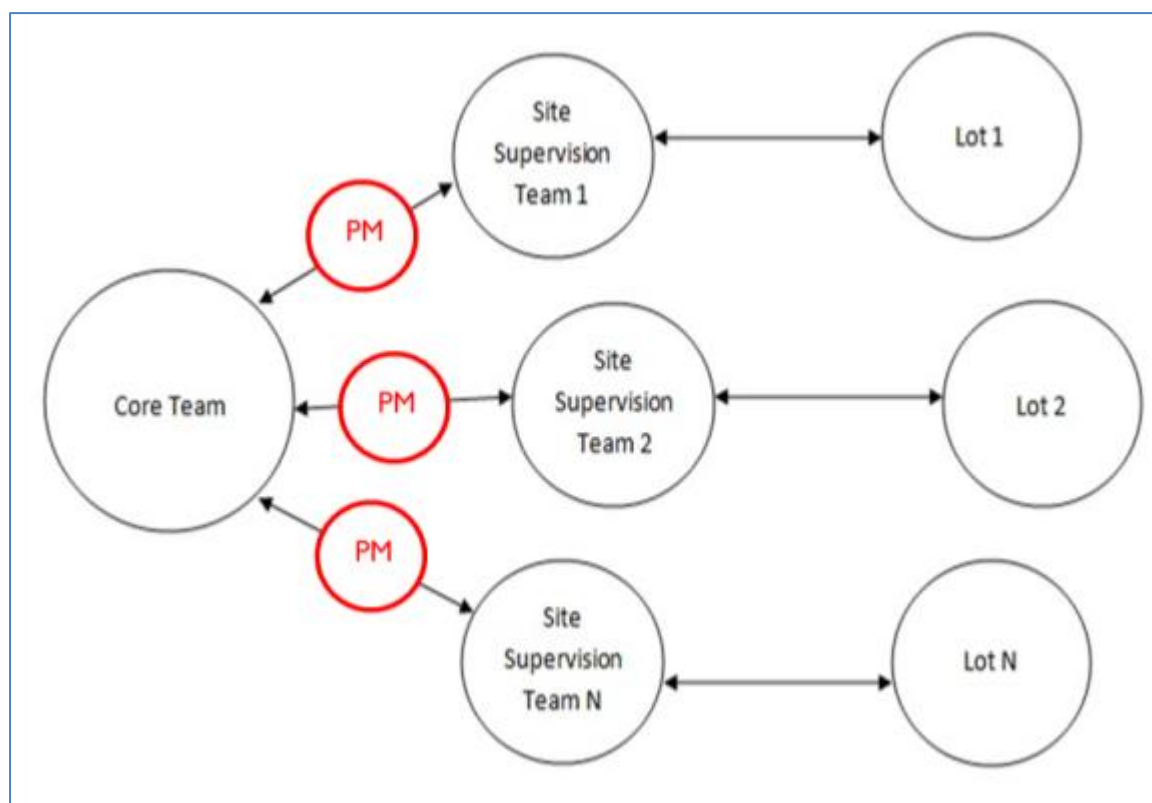
Obligations, responsibilities, accountability, and communication issues among the MDF staff involved in the design/construction management are governed by MDF's charter and contractual agreements

with its service providers. The USAID program management team established at MDF is responsible for overall coordination of the MDF efforts.

MDF's organizational units work on technical, financial and legal issues related to construction works undertaken under all project components in coordination with the dedicated USAID MDF Program Management Team (consisting of three people).

MDF's project management team consists of the dedicated core team and site supervision teams or site supervisors (see Figure 11). Before the commencement of works and after procurement strategy is determined, MDF presents the project specific core and site specific management team configuration and structure for each contract.

Figure 11 MDF Project Management Structure



The Core team consists of MDF staff. Heads of respective MDF units are responsible for solving technical, financial, and legal issues raised during construction period. Although overall responsibility for construction management rests with management of MDF, heads of the units assign employees to work on the issues under their supervision.

USAID has the final approval right for the structure proposed and for the individuals recommended based on their qualifications. The project management team and the team members individually are supported by additional training provided by Tetra Tech before and after signing of the construction contracts, as training needs are identified.

In the bidding documents that MDF has developed for the three Components, MDF has included the concept that a Project Manager (PM), shown in red above, will be placed between the core team, which is primarily an MDF home office based management task force and each of the site supervision teams. This enables MDF and its core team to have a singly focused representative managing the activities of each site supervision team.

7.2.4 Scope Management

The scope of work is defined in the design/construction contracts. Contractors are closely monitored to ensure that works are performed in accordance with the original scope.

For the DB and construction contracts, a final scope of work is determined after an approved contractor finalizes the final working drawings. The correctness of engineering solutions proposed by a contractor, its final working drawings, and any changes in BOQs are subject to approval by MDF, USAID, and Tetra Tech.

After the scope of work and quantities of the work are determined, MDF monitors and controls the implementation process to ensure that work is executed according to the agreed scope, specifications and requirements.

MDF's site specific monitoring personnel are required to update MDF's management core team on a weekly basis about the performance of a contractor and whether its work is compliant with the original scope. Any unauthorized deviation is required to be reported to the MDF project management core team. Site teams are expected to respond to the deviation in accordance with any instructions received from MDF, however where such deviations could cause environmental, social, or safety problems, the site supervision teams are authorized to issue a stop order immediately pending receipt of MDF instructions.

There will be several occasions when authorized scope change may occur during design/construction. The contractor will initiate a change request and MDF will decide if the change is required. MDF will then send the request to USAID, through Tetra Tech, for approval. Tetra Tech will review and recommend approval/disapproval of the change request. USAID will then approve or disapprove such change request. Tetra Tech will inform MDF of the decision and MDF will inform the contractor.

7.2.5 Cost Management

The contract price is agreed and determined during the process when procurement is finalized and contract negotiations are conducted. After signing the contract, the Contractor prepares a monthly project cash flow projection. The MDF Core team shall monitor progress and financial performance of Contractors. If there are deviations corrective action will be taken. For DB contracts, the preparation of a final design may result in adjusted quantities that affect the overall contract cost. A single price variation resulting in a contract amendment may be allowed based on the accepted revised price following presentation and acceptance of the final design.

After each period specified in the contract, a contractor will be required to prepare invoices based on the activities or quantities of works performed including and reflecting all payment retentions envisioned in contract. After submission of an invoice, MDF will review and verify the quantities, the total amount requested, and unit rates applied. Before starting the payment procedures and after finalization of internal clearance, MDF will be required to provide approved invoices to USAID and Tetra Tech for their consent. USAID and Tetra Tech will not be responsible for reviewing the net quantities presented in invoice by the contractor.

7.2.6 Schedule Management

A reasonable duration for the construction period is defined in the procurement documents prepared by MDF. The bidding evaluation committee considers carefully a Contractor's ability to perform the work within the contract period. Tetra Tech conducts a due diligence review of the recommended successful bidder. USAID approves the contractor. After awarding the contract and issuing the commencement of works, the contractor is required to present a detailed program

schedule within a required contract period. The schedule must be approved by MDF. Before final approval, MDF submits the program to USAID and Tetra Tech for their consent.

MDF site supervision teams monitor the progress. The progress of the work is discussed at a minimum during monthly progress meetings attended by USAID and Tetra Tech representatives and, if necessary, recommendations are given on the required steps based on the existing progress. Deviations between the original and actual schedule are reported to the MDF core management team. MDF then requests the contractor to take appropriate steps to maintain the approved program schedule for the works. All revisions in the contractor's program schedule must be submitted to MDF. After receiving a request for schedule revision, MDF reviews and approves or disapproves the request. Before final approval MDF submits the program to USAID for their consent and USAID then will seek Tetra Tech's recommendation before giving or withholding its consent.

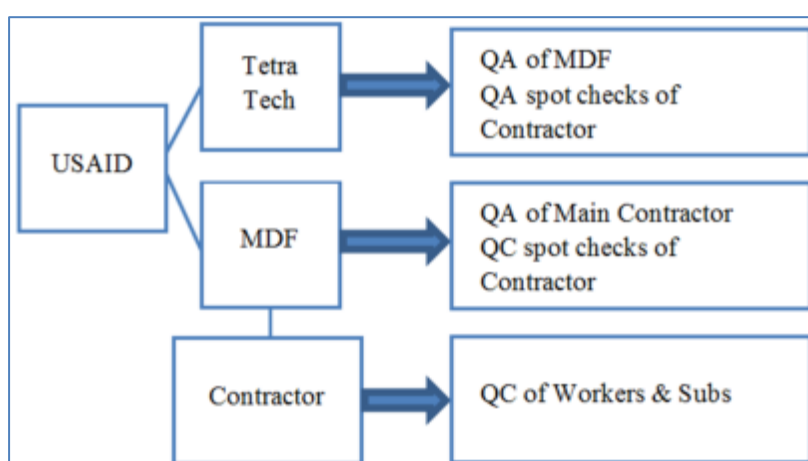
There may be other circumstances when a program schedule for the works may need to be revised. A contractor is entitled to request an extension of time. Time extensions may be approved by USAID with Tetra Tech recommendation.

7.3 Quality Assurance/Quality Control Management

The purpose of QA/QC Management (QA/QC) is to ensure that all work is performed according to the standard specifications and requirements identified in the contract documents. Adjustments will be made when necessary and applicable to reflect realities of USAID and host country preferences, conditions, available materials and O&M considerations.

QA/QC during project implementation is an extremely important safeguard to meet expectations of the projects sponsors, implementers and ultimately the beneficiaries. This includes process checks and tests performed by the various concerned parties and related management systems. QA/QC should be adhered to throughout the project implementation and construction process. QA/ QC are two distinct but interrelated functions. QA is defined as a system of general programmatic activities implemented to ensure QC is performed properly. QC is defined as a series of specific activities performed to ensure that a product of expected quality is delivered. The relationships within the GMIP are shown below.

Figure 12 Top-Level QA/QC Structure



7.3.1 GMIP QA/QC Plan

As oversight engineers for USAID, Tetra Tech is responsible for performance of QA activities. A QA Manual (Quality Management System – QA/QC Plan, July 2102) for oversight of the design/construction contractors has been prepared and is being implemented by Tetra Tech and MDF. This is an all-inclusive application of standards and procedures to ensure that the finished facility meets or exceeds the desired performance criteria as specified in the design and construction documents. It includes the necessary documentation to verify that all steps in the QA process have been satisfactorily completed. The purpose of the GMIP Guidelines and QA/QC Plan is to:

- Ensure that design work is done in accordance with industry acceptable standards and USAID and Georgian government rules and regulations
- Ensure that all GMIP construction work is accurately planned and organized
- Ensure that organized procedures and instructions are issued for the performance of all GMIP construction works
- Ensure qualified inspection results in expected and required quality
- Demonstrate through properly documented records that the work has been carried out and inspected to that required quality.

The lines of authority and communication for GMIP are presented in Figure 13.

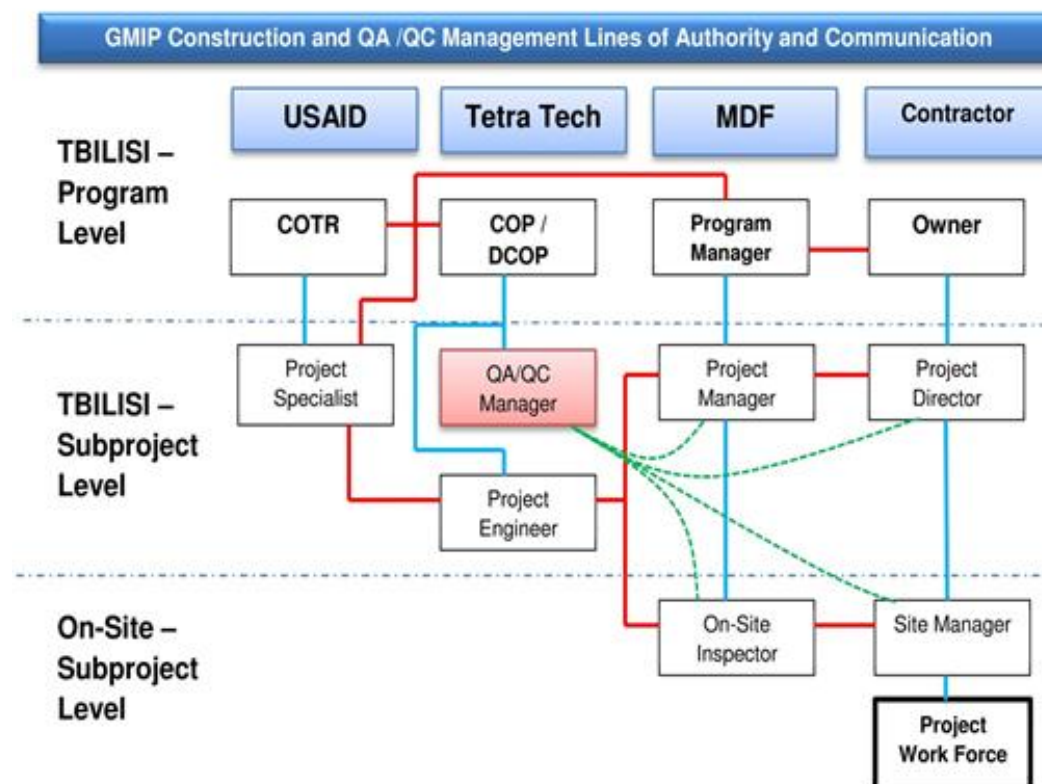


Figure 13 GMIP Lines of Authority and Communication

MDF, with technical assistance from Tetra Tech, is designated by GoG and USAID for the procurement and implementation of all works. MDF is responsible for the performance of the contractor QC activities. This includes inspecting, measuring and testing the work performed to identify any variances from the performance standards indicated in the construction plans and specifications, taking action to correct or minimize any adverse variances, and making every reasonable effort to improve performance such that all activity are in total conformance with established work standards and the Contract documents. MDF is using its own personnel to perform QC activities. It plans to complement their own personnel with external QC engineers with sufficient qualifications and experience through consulting services contracts for construction

management. In case of the irrigation component, MDF has adjusted their approach to using staff from the MOA Irrigation Company to assist with QC supervision activities and is planning to increase the level of management and inspection efforts with explicit MDF management and inspection staff dedicated specifically to the Irrigation subcomponent.

In addition to the foregoing, MDF is expected to secure via its contracts with the actual builders and construction companies a large measure of self-Quality Control (QC) by those same builders and companies. Thus, these entities will be obligated to develop and impose upon their workers a QC scheme which will perform a large part of the QC burden. In the case of the DB contracts the contractor's designer is expected to play a key role in QC. In checking and monitoring whether its contractors, builders and companies are following through on their obligations to ensure QC, MDF will actually be conducting the first level of QA.

Contractors to MDF must submit their construction QA/QC plans for review and acceptance. The construction manager, MDF, and its technical adviser, Tetra Tech, will maintain all submittal files via a combination of a secure document filing and storage system, and a computerized document control tracking. Tetra Tech advises the construction contractor on requirements in this regard. To assist the contractors Tetra Tech has prepared of the following

- Guidelines for Mobilization Plan Evaluation (English and Georgian versions)
- Guidelines for QC Plan Evaluation (English and Georgian versions)
- Guidelines for Method Statement Evaluation (English and Georgian versions)
- Health and Safety Plan (English versions)

QA/QC personnel perform checks and tests throughout the construction process, providing the project sponsors (and ultimately the beneficiaries) assurance that the project is being built according to specifications. General construction inspection and verification requirements include inspections, QC testing, QA testing, establishing construction acceptance criteria, compliance with handling, storage, packaging, preservation, and delivery requirements, material identification and traceability, etc. Inspections do uncover construction deficiencies. These are identified, reported, and preventive and corrective action taken.

Field changes for QA/QC are limited to the construction QA/QC Plan and contractor QC plan changes. Changes to construction processes or design plans and specifications are governed by the remedial action work plan and design change order procedures.

Document handling and retention procedures are important. On-site records are updated by the contractor and MDF on a daily basis and daily construction reports are prepared. The construction QA/QC plan requires that all construction drawings be stored and that as-built drawings be prepared and reviewed.

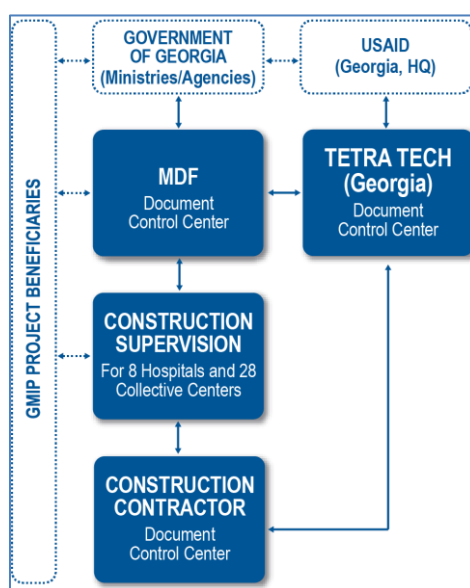
The project sponsor (USAID) and beneficiary (GoG), the technical advisor (Tetra Tech) and construction manager (MDF) may initiate revisions to the construction QA/QC Plan. It may be revised whenever it becomes apparent that the construction QA/QC procedures or controls are inadequate to support work being produced in conformance with the specified quality requirements, or are deemed to be more excessive than required to support work being produced in conformance with the specified quality requirements.

The success of the MDF QA/QC Program and the Tetra Tech QA Program relies on the submission of material samples, the construction of sample panels of work, and the observations and visual inspections by Tetra Tech's QA Engineering staff and MDF's QA/QC PM and site teams. For the DB contracts the contractor's design engineers are also expected to take a lead role in QA/QC. Vasil Apkhazava, our Senior QA/QC Engineer is leading these efforts under the direct supervision of Glen Wills, Tetra Tech COP.

7.3.2 Document Control Plan

As required in the QA/QC management system, document handling and retention procedures are being implemented for the purposes of GMIP by Tetra Tech and MDF, defining secure document filing and storage system with computerized document tracking system. Prospective external contractors are required to comply or be compatible with the requirements with regard to document control as shown in Figure 14. Document exchange rules apply when reporting to project sponsor and beneficiary governments USAID and GoG agencies. To that end, the Document Control Procedure and related tools and systems have been defined by Tetra Tech in conjunction with MDF. A Document and Data Control Policy manual was prepared (June 2012) and is being implemented.

Figure 14 Document and Data Management Control



7.3.3 Tetra Tech Internal QA/QC

The COP has responsibility for the overall quality of all the Tetra Tech deliverables. DCOP also reviews deliverables prior to submittal as required. Vasil Apkhazava is the Tetra Tech local QA/QC Engineer. Brian Potvin, Home Office Task Order Manager, has been designated as QA/QC design quality manager. English language translations are prepared by Maia Dvali (Translator/Interpreter). community outreach and field Interpretation is done by Archil Lezhava (Program Specialist/Field Interpreter). Document control is managed by Anna Urotadze (Manager of Information Systems) who also works with the outreach program. .

Site Visits/Minutes of Meetings

All Tetra Tech staff is required to prepare minutes of meetings and site visit reports for all field trips.

Assignment Reports

All expat STTA are required to prepare assignment reports as part of their approved SOW. These are submitted as deliverables to USAID.

Weekly Reports

Weekly reports are required by USAID. They are prepared by the DCOP, reviewed by COP and submitted to USAID. Tetra Tech regional office in Kutaisi also prepares weekly reports on its activities that are integrated into the weekly reports to USAID.

Weekly Staff Meetings

Weekly staff meetings are held with the Tetra Tech field office staff to discuss progress, problems, and issues.

Tetra Tech Field Office Review and Approval Procedures

Tetra Tech field office review and approval procedures are outlined below:

1. Task Assigned by DCOP
2. Task Plan prepared and approved by COP or his designee
3. Daily update to DCOP or his designee on task progress
4. Weekly update with DCOP. If there are problems COP is informed immediately.
5. If field trip/site visits: Site Visit report prepared and submitted to DCOP.
6. Draft Task report submitted to DCOP for review
7. COP corrects and approves
8. COP sends to HO for review (key deliverables as required)
9. COP submits final approved deliverables to USAID with copy to MDF.

7.4 GMIP Environmental Procedures

Environmental Mitigation and Monitoring Plans (EMMPs) were developed for each GMIP activity, including housing, irrigation and roads, and mitigate potential environmental impacts, socio-economic impacts and public health and safety impacts during GMIP I. Each mitigation measure included monitoring indicators and reporting frequency that varied from one time during construction or operation to quarterly or monthly. EMMPs provided for mitigations in implementation contracts with inspections by MDF and GMIP (Tetra Tech). These procedures are intended to assess how well the project is doing against what was predicted when the initial environmental review was completed. Tetra Tech procedures to ensure proper contractor and MDF implementation of EMMPs include:

- For each implementation contract, assist MDF prepare a summary of mitigation measures, indicators and monitoring/reporting frequency.
- Provide training to MDF and implementation contractors on EMMP mitigations, what they mean and how to implement and report on EMMP requirements.
- Using mitigation summaries assist MDF and implementation contractors prepare quarterly compliance assessment reports indicating whether mitigation measures are being implemented properly. Identify measures with implementation problems and steps planned to address deficiencies.
- Conduct annual audits of EMMP implementation under GMIP contracts. Include site inspections and assessment of implementation with documentation and pictures. Identify measures completed and those with problems needing modification of mitigation measure or development of new measures. Include environmental audits as part of contract and project results reporting.
- Provide end-of-contract report on EMMP implementation. Describe measures completed, impacts and benefits, and lessons learned. Provide recommendations including changes for future mitigations. Provide answers to EMMP questions such as: How effective were mitigation measures? Were original project assumptions correct? How can future activities be improved?

8. REPORTS AND DELIVERABLES

All reports and other deliverables will be in the English language, unless otherwise specified by the COR. The list of deliverables is subject to adjustment by the COR is given below:

Table 12 Reports and Deliverables (July 2013 – December 2014)

Report	Due Date
A. Report of Rapid Appraisal of Infrastructure/Housing Subprojects	Within 15 days of contract award
B. First Year and Project Work Plan	Within 30 days of contract award
C. Bi-Weekly Meetings and Reporting	Bi-weekly or more frequently if necessary
D. Quarterly Progress Reports	Within 10 days of the end of fiscal year quarter and will follow the U.S. Government USG reporting periods which begin October 1. 1/10/13; 4/10/13; 7/10/13
E. Performance Monitoring Plan PMP	Within 45 days of contract award
F. Annual Work Plans	July 30
G. Annual Report	November 1, 2014
H. End of Activity Report	At the end of the contract
I. Success Stories	At the direction of USAID/Georgia.

A. Report of Rapid Appraisal of Infrastructure/Housing Subprojects. This written/oral report will be presented to USAID and partners within 15 days of contract award. The report will include background information gathered by the contractor based on current project progress, will correspond to identified issues/problems, and will be used in the development of the first year work plan.

B. First Year and Project Work Plan. An oversight and monitoring work plan in a format acceptable to USAID for the first year of the activity and a general work plan for the entire activity to be finalized within 30 days of contract award. The work plan will have separate sections for each of the components of this SOW and shall include task items such as start/completion dates, work activities, long-and medium/short-term personnel needs, procurement planning, etc. It shall also include a management structure, proposed schedule, work flow, and overall program approach.

C. Bi-Weekly Meetings and Reporting. Twice weekly meetings are being held between USAID/MDF/Tetra Tech. Other partners such as MRA also attend. The purpose of the meetings are to present and discuss progress, identify opportunities for program improvement, and resolve problems as required. Meeting minutes are prepared by MDF. Tetra Tech also prepares and submits a weekly status report to USAID.

D. Quarterly Progress Reports. Tetra Tech submits quarterly progress reports to USAID within ten (10) days of the end of fiscal year quarter and following the US Government reporting periods which begin October 1. These reports summarize progress of the major activities during the period of performance, indicating any problems encountered and steps taken to resolve them or proposing remedial actions as appropriate. It informs the CO and COR of any problems, delays, or adverse conditions that materially impair Tetra Tech's ability to meet the requirements of the contract.

E. Performance Monitoring Plan. In close coordination with USAID and MDF, Tetra Tech developed and submitted a Performance Monitoring Plan (PMP) to USAID. The PMP identifies the start date of each task and the expected completion date. Critical path timelines with milestones have been established and reported on, identifying relevant sub-activities needed to achieve successful completion. The PMP reports progress against USAID established indicators over the life of the activity – these indicators were provided to the Tetra Tech by USAID. MDF is updating the PMP in their Annual/Semiannual Progress reports.

F. Annual Work Plans. Tetra Tech submits annual work plans that detail the work to be accomplished during the upcoming year. The work plan is to be submitted no less than 30 days prior to the end of each fiscal year. Annual work plans may be revised on an occasional basis, as needed, to reflect project changes on the ground and with the concurrence of the COR.

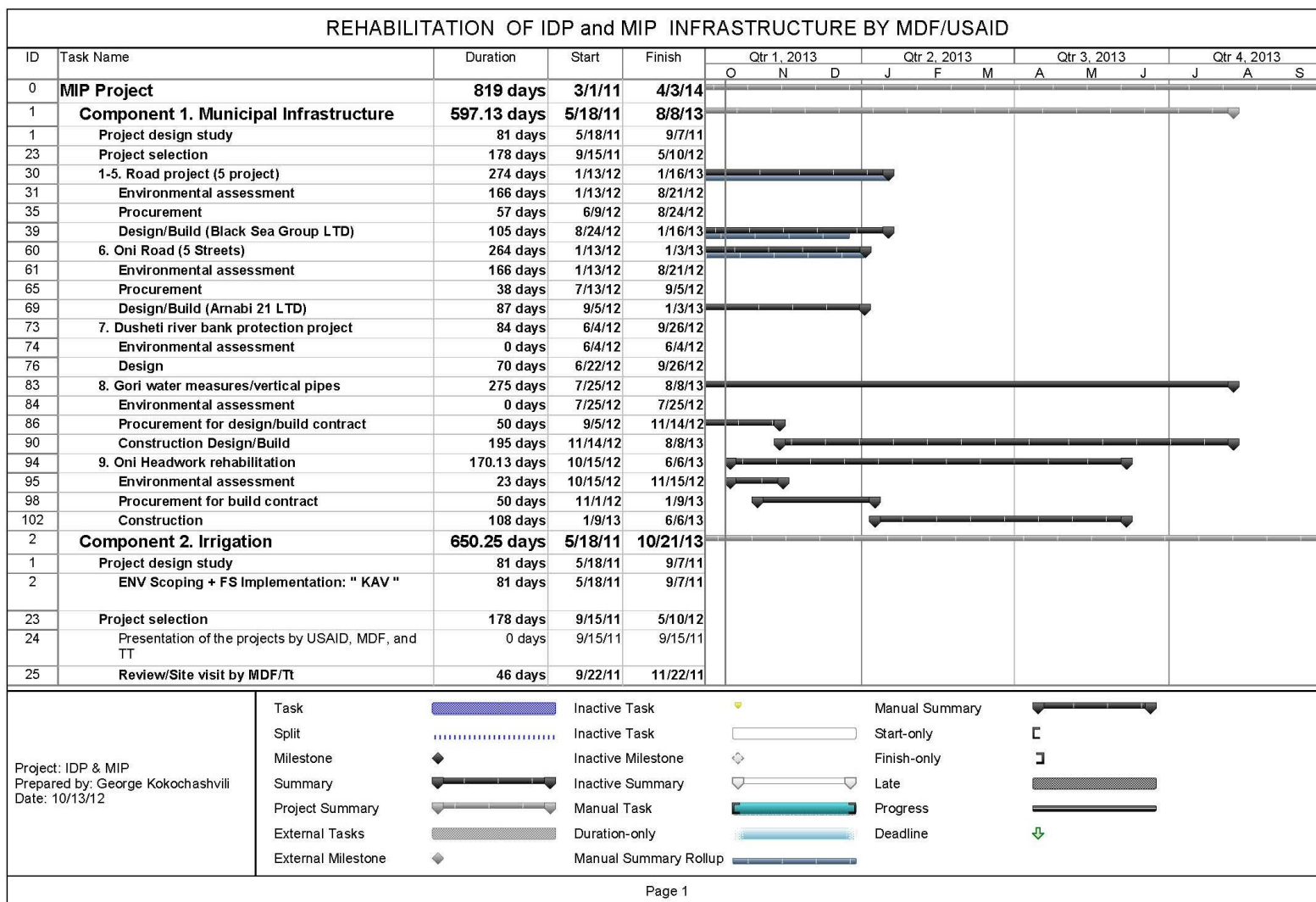
G. Annual Report. Tetra Tech submits an annual report for each Fiscal Year combining the activities of all four quarters a separate fourth quarter report is not necessary and providing an assessment towards achieving the annual objectives set forth in the annual work plans, including information for USAID performance indicators PMP. This report is due 30 days after the end of the fiscal year.

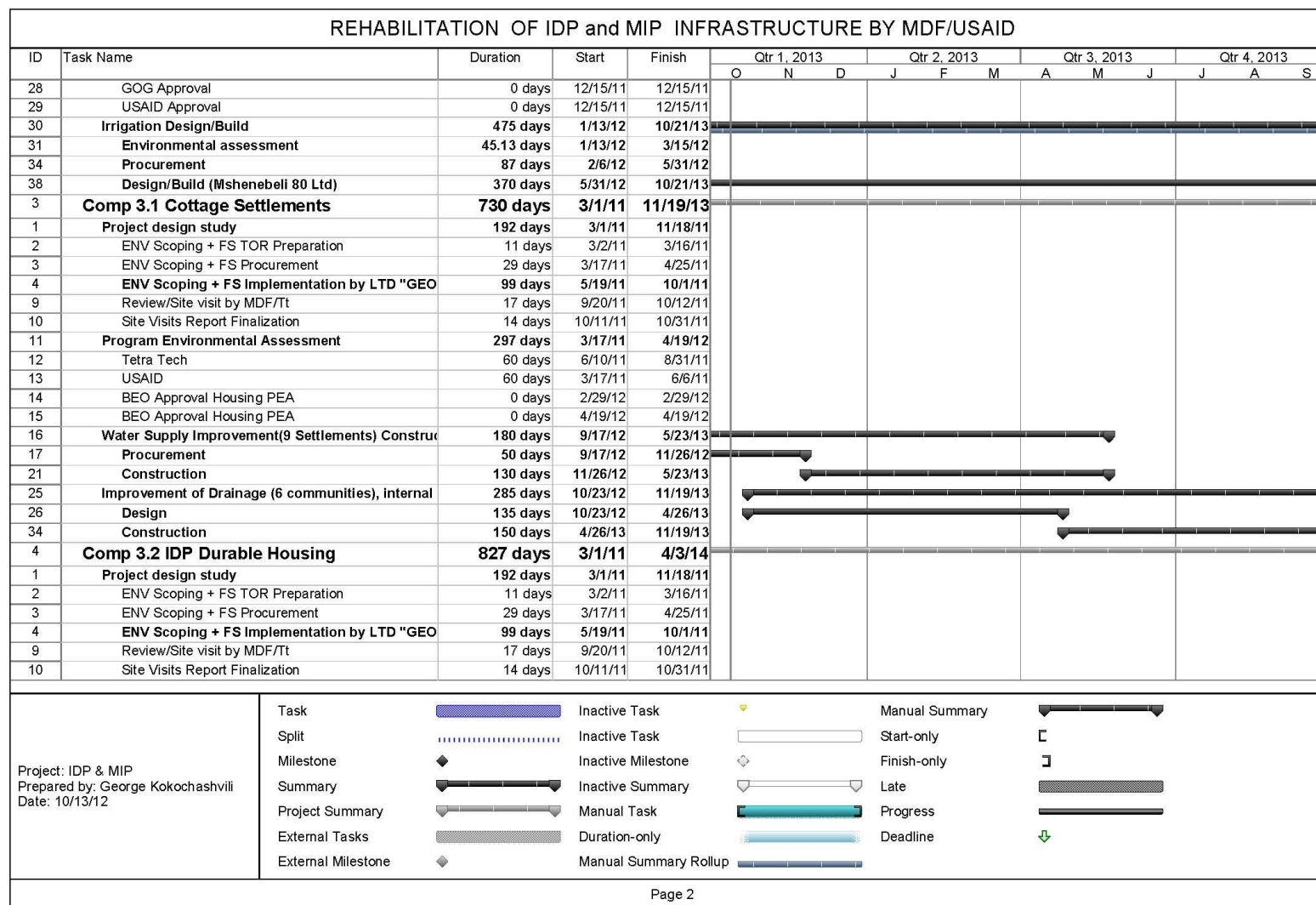
H. End of Activity Report. At the end of the contract, Tetra Tech will prepare a final project Report that contains the following information:

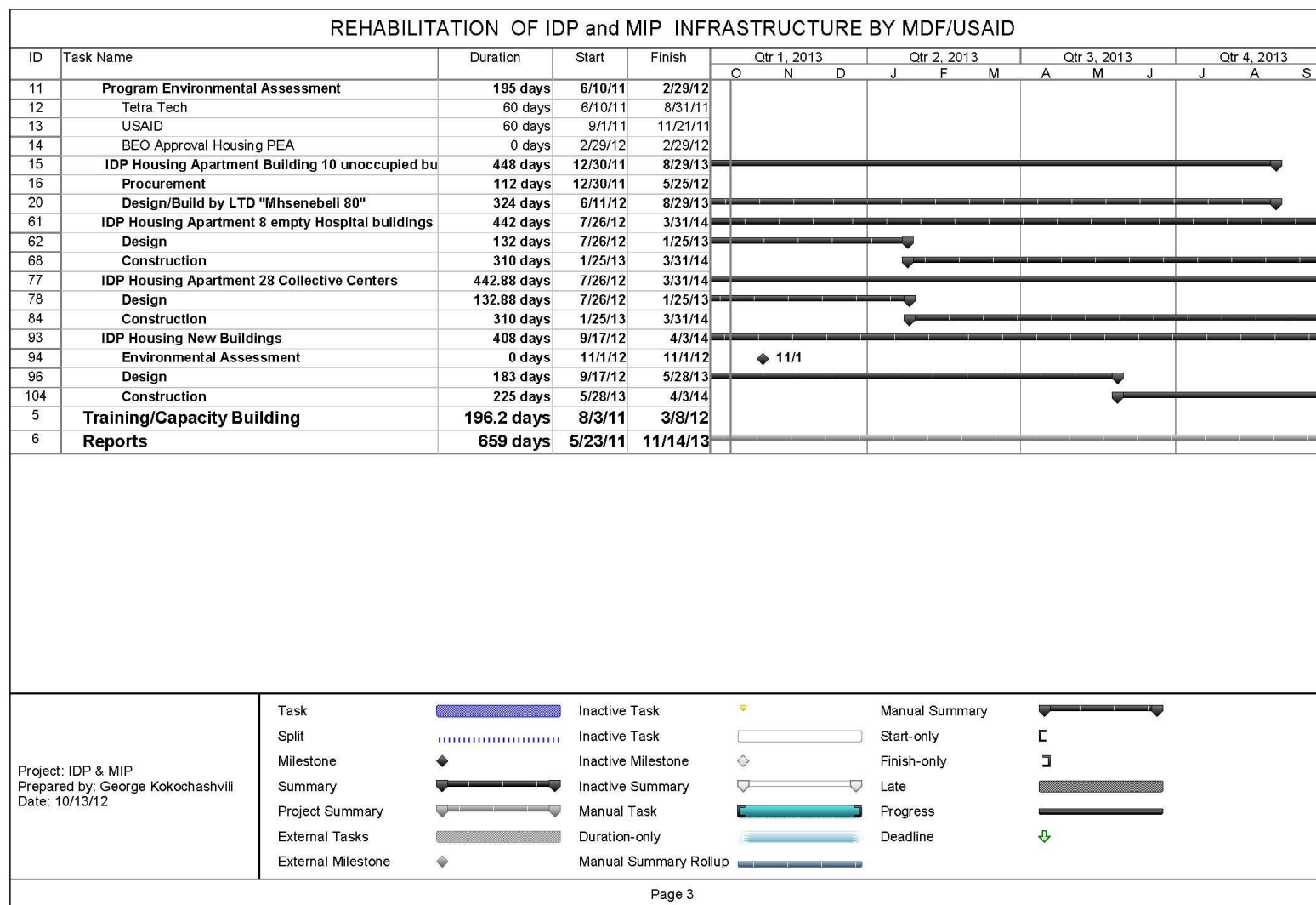
- Specific objectives of the program;
- Activities undertaken to achieve program objectives;
- Results achieved by objective, including life-of-program reporting according to the performance monitoring plan;
- Actions taken to leverage resources and to ensure the continuation and sustainability of program objectives and the effectiveness of these actions;
- Recommendations regarding unfinished work and/or program continuation; and
- Lessons learned over the course of the program.

I. Success Stories. Tetra Tech will prepare success stories and other outreach materials at the direction of USAID/Georgia.

ANNEXI: TETRA TECH IMPLEMENTATION SCHEDULE (October 2012 – September 2013) *NEED SCHEDULE THRU DEC 31, 2013*







ANNEX 2: LIST OF KEY PROJECT STAFF

	Mngt/ Admin		Engineering							Contract Admin				Other		
	Project Management	Project Admin/Support	Roads	Flood Protection	Building Construction	Water and Sanitation	Irrigation	Construction Management	Inspection	Procurement	Finance	Monitoring	Codes and Regulation	Environmental Assessment	Training	Public Awareness
Project Office Management																
Marjory O'Brien, Technical Advisor, STTA	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Glen Wills, Chief of Party, LTТА	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x
Andy High, IDP Construction Mgr, LTТА	x	x		x	x	x	x	x	x	x		x		x	x	
Project Office Admin/Procurement																
George Nizharadze, Office Administrator, LTТА		x								x						x
Archil Lezhava, Program Specialist/Field Interpreter, LTТА		x													x	x
Anna Urotadze, MIS Manager, LTТА	x	x								x			x		x	x
Maia Dvali, Translator, LTТА												x		x		x
Engineering Oversight																
Otar Maghalashvili, Irrigation Engineer, LTТА		x					x	X	x	x		x			x	
Givi Varduashvili, Infrastructure Engineer, LTТА	x	x	x	x		x	x	X	x	x		x			x	
Teimuraz Levanishvili, Housing Specialist/Engineer, LTТА	x	x	x	x	X	x		X	x	x		x			x	
Vasil Apkhazava, QC Specialist, LTТА	x	x			X			X	x			x			x	
Koba Tsiramua, Regional, LTТА Engineer	x	x			X			X	x			x			x	
Avtandil Baramia, Regional Construction Oversight Engineer, LTТА	x	x			X			X	x			x			x	
TBD (Kutaisi), Regional Construction Oversight Engineer, LTТА		x			X			X	x			x			x	
Irakli Gogrichiani, Water/Wastewater Engineer, STТА		x		x		x		X	x			x			x	

Maia Davitidze, Architect, STTA		x			X			x	X			x	x		x	
Contract Administration Oversight																
Mamuka Makhatadze, Procurement Specialist, STTA										x					x	
Demna Sakhltkhutsishvili, Financial Management Specialist, STTA		x									x					
Anna Urotadze, Document Control Oversight, LTTA		x										x			x	
Environmental Support																
Mamuka Shaorshadze, Environmental, Health and Safety Specialist, LTTA		x							x			x		x	x	
Mamuka Gvilava, Environmental Technician / EHS Officer, STTA									x	x		x	x	x	x	x
Home Office Support																
Shelley Rice, Procurement/Subcontract Manager Sr., HO	x	x														
Renee Valentino, Contracts/FM Sr., HO	x	x														
Firouz Rooyani, IDIQ Contract Manager, HO	x	x														
Brian Potvin, Home Office Manager, HO	x	x														
Ewelina Mroczka, Sr. Contract Manager, HO	x	x														
Susan DeMarre, Project Analyst, HO	x	x														
Brian Bemis, Project Finance Administrator, HO Rosemary ?	x	x														
Kathryn Carpenito, Project Finance Administrator, HO	x	x														
	x	x														
TOTAL																

ANNEX 3: PROJECT LEVEL OF EFFORT

Tetra Tech EM Home Office Support

		Y1	Y2	TOTAL
Procurement/Subcontracts Manager Sr.	Shelley Rice	4	4	8
Contracts/FM Sr.	Renee Valentino	7	6	13
	Subtotal	11	10	21

Tetra Tech CIG LTTA

Technical Advisor	Marjory O'Brien	10		10
Chief of Party	Glen Wills	255	128	383
IDP Construction Mgr	Andy High	245		245
	Subtotal	510	128	638

Tetra Tech CIG STTA

STTA Engineering Support	TBD	40		40
Closeout Specialist	TBD		30	30
	Subtotal	40	30	70

Tetra Tech CIG Home Office Support

IDIQ Contract Manager	Firouz Rooyani	2		2
Home Office Manager	Brian Potvin	10	5	15
Sr. Contract Manager	Ewelina Mroczka	1	1	2
Project Analyst	Susan DeMarre	2	2	4
Project Finance Administrator	Brian Bemis	5	5	10
Project Finance Administrator	Kathryn Carpenito	5	2	7
Technical Advisor	Marjory O'Brien	20		20
	Subtotal	45	15	60

Tetra Tech ES Home Office Support

Contracts Specialist	Stephanie Coulis	5	10	15
Accountant	Christina Gogsadze	10	10	20
	Subtotal	15	20	35

Tetra Tech ES CCNs Consultants Long Term

				0
Irrigation Engineer	Otar Maghalashvili	260	0	260
Infrastructure Engineer	Givi Varduashvili	260	0	260
Housing Specialist/Engineer	Teimuraz Levanishvili	260	112	372
Environmental, Health and Safety Specialist	Mamuka Shaorshadze	260	44	304
QC Specialist	Vasil Apkhazava	260	112	372
MIS Specialist	Anna Urotadze	260	112	372
Document Control Specialist	TBD	215	112	327
Regional Engineer	Koba Tsiramua	260	112	372
Regional Construction Oversight Engineer	Avtandil Baramia	260	66	326
Program Specialist/Field Interpreter	Archil Lezhava	260	0	260
Translator	Maia Dvali	45	0	45
Office Administrator	George Nizharadze	260	112	372
Water/Wastewater Engineer	Irakli Gogrichiani	260	0	260
Water/Wastewater Engineer	TBD	215	0	215
QA/QC Engineer	TBD (Kutaisi)	215	66	281
Regional Construction Oversight Engineer	TBD (Kutaisi)	215	112	327
	Subtotal	3,765	960	4,725

CCNs Consultants Short Term

Environmental Technician / EHS Officer	Mamuka Gvilava	20	0	20
Architect	Maia Davitidze	255	0	255
Financial Management Specialist	Demna Sakhltkhutsishvili	60	60	120
Procurement Specialist	Mamuka Makhatadze	60	0	60
	Subtotal	395	60	455
GRAND TOTAL		4,781	1,223	6,004

US Agency for International Development

1300 Pennsylvania Avenue, NW

Washington, DC 20523

Tel: (202) 712-0000

Fax: (202) 216-3524

www.usaid.gov